



TRIENNIAL REPORT

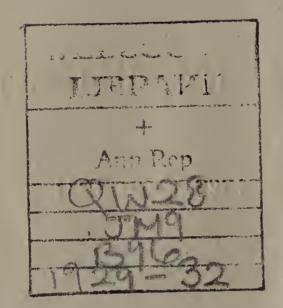
ON

VACCINATION IN BURMA

FOR THE YEARS 1929-30 to 1931-32

Rangoon
Supdt., Govt. Printing and Stationery, Burma
1932

Price,—Rs. 1-8=2s. 3d.]







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RESOLUTION

ON THE

Triennial Report on Vaccination in Burma

For the Years 1929-30 to 1931-32.

Extracts from the Proceedings of the Government of Burma, Public Health Department,—No. 267S32, dated the 3rd October 1932.

READ-

The Triennial Report on Vaccination in Burma for the years 1929-30 to 1931-32.

RESOLVED THAT—

The Report be published.

By order,

H. G. WILKIE,

Secretary to the Government of Burma, Education Department.

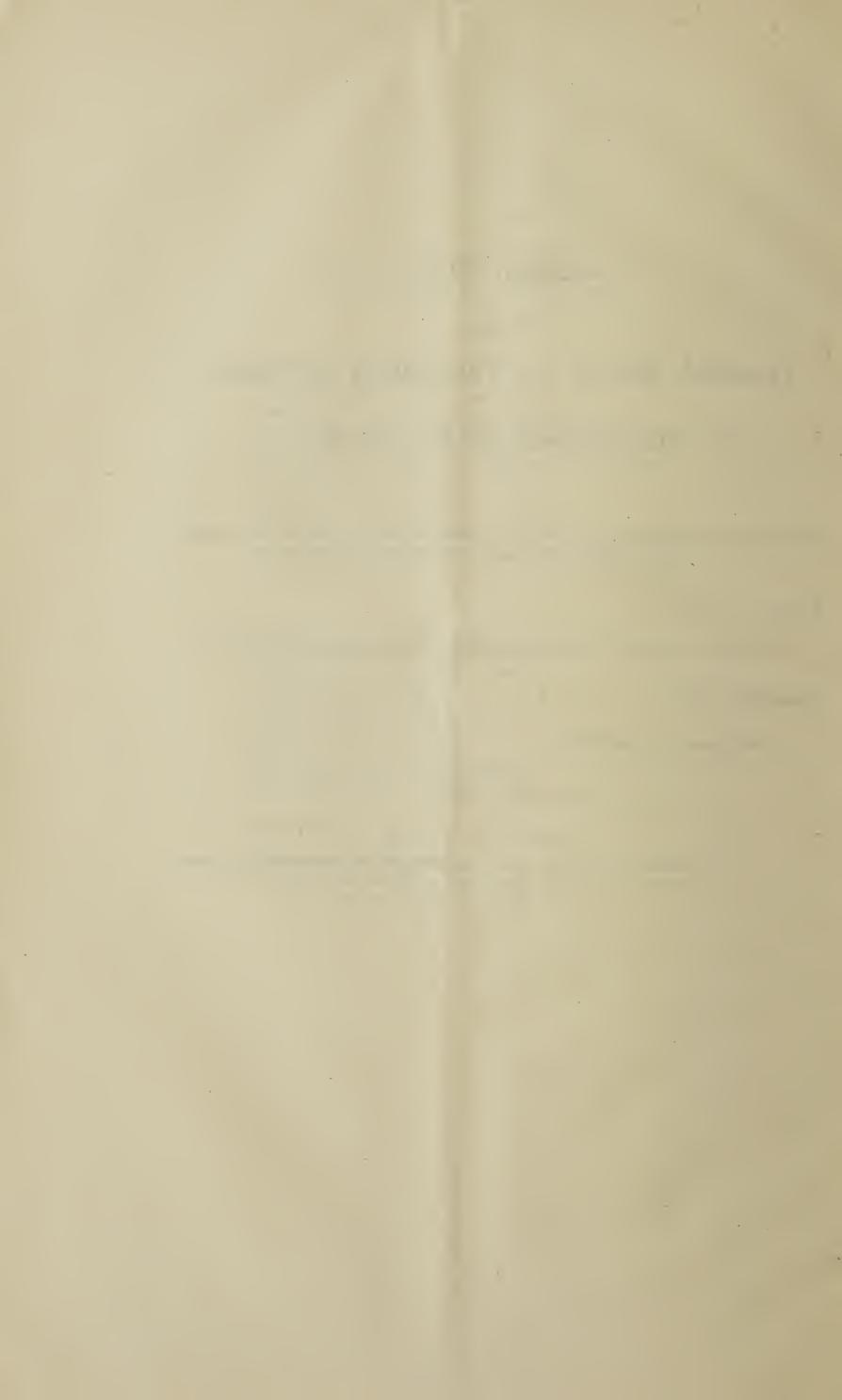


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TRIENNIAL REPORT

ON

Vaccination in Burma

For the official years (April to March) 1929-30 to 1931-32.

GENERAL REVIEW—In the three years under review, good progress in the work of the Vaccination Department in both the Province and the Shan States was recorded. The number of vaccinations and revaccinations combined exceeded those of the previous triennium by 309,490. It is encouraging to note that the incidence of smallpox fell during the same period. The following table illustrates this:—

Years.		Incidence o	f smallpox	Vaccinations performed					
		Attacks.	Deaths.		Primary.	Revaccina- tion. (5)	Total. (6)		
1926-27 1927-28 1928-29		5,035 8,282 7,137	2,233 2,452 2,419		515,359 556,522 615,519	210,37 7 3 2 3,1 1 0 333,203	725,736 879,632 948,722		
Total		20,454	7,104		1,687,400	866,690	2,554,090		
1929-30 1930-31 1931-32		4,748 3,334 4,790	1,686 837 1,113		628,785 616,477 605,945	356,459 283,633 372,281	985,244 900,110 978,226		
Total		12,872	3,636		1,851,207	1,012,373	2,863,580		
Difference	•••	- 7,582	- 3,468		+163,807	+145,683	+ 309,490		

An increase in the strength of the establishment was also recorded. The Vaccination Acts of 1880 and 1909 were extended to the areas of three district councils, viz. Lower Chindwin, Myingyan and Meiktila, and to 6 notified areas, viz. Minbya, Chauk, Myitnge, Myitkyina, Ye-u and Mawlaik. The Acts appear to have been more universally enforced in the Province as several officers reported prosecutions. No serious opposition to vaccination, however, was encountered. Compulsory revaccination was introduced in 20 towns and in 8 district council areas. These are shown in Appendix C.

The presence of an epidemic of smallpox gives rise to an increased number of vaccinations and revaccinations, as at that time the people are more alive to the dangers of the disease and to the benefits of vaccination. Thus, the vaccination figures for Akyab, Sagaing, Amherst and Rangoon, each of which had an epidemic, show a marked increase. It is pleasing however to note that an increase in vaccinations took place in some districts without the unpleasant stimulus of an epidemic. In these districts such a welcome improvement is to be ascribed to an increased staff, a more rigid enforcement of the vaccination law and to better co-operation on the part of district officials and local bodies. Propaganda also has had its share in the success, as it has helped to educate the people to understand how the scourge of smallpox can be avoided. Continued and increased propaganda will be necessary to gain the wide appreciation of the public regarding the benefit of vaccination.

Statement I. 2. Total Operations—

BURMA—The total number of vaccinations performed in Burma excluding the Shan States during the triennium shows an increase of 271,051 over the previous triennium, as shown below:—

		Numb	er of Opera	tions.
Year.		Primary.	Revacci- ation.	Total.
1929-30 to 1931-32	•••	1,667,758	956,079	2,623,837
1926-27 to 1928-29	•••	1,509,796	842,990	2,352,786
Increase		157,962	113,089	271,051

Out of the 38 districts in Burma proper, 26 reported an increase in the combined rural and urban figures and 12 showed a decrease.

The highest increase was reported from Akyab district, where 52,282 more operations were done in this triennium. Of this increase 12,458 were primary operations. The presence of a smallpox epidemic largely accounts for the higher figures.

The second highest increase was reported from Meiktila district, 34,825 more operations being performed during the triennium. These were almost all revaccinations. As there were only a few smallpox cases, the officers and staff deserve credit for this good work.

The third highest increase was reported from Sagaing, 29,961 more operations having been carried out. This district suffers from the failure of the District Council to extend the Vaccination Acts and it is regrettable to have to relate that smallpox was prevalent all through the triennium, just as it was during the previous three years.

Other districts returning a considerable increase are Amherst (+25,731), Mandalay (+22,233), Bassein (+15,650), Insein (+15,480), Rangoon (+15,164), Pyapon (+14,802), Myaungmya (+12,665) and Mergui (+10,422).

The increase in Amherst and Rangoon was mainly due to the presence of a smallpox epidemic. In Mandalay special efforts were made by the municipal health staff in 1930-31 to get the population vaccinated. The District Health Officer, Bassein, reports that a prediction was made by local Burmese sages that a severe outbreak of smallpox would occur in 1930-31 and this unusual reason accounts for the increased numbers who resorted to vaccination. In Insein district good vaccination work by the Hlegu Health Unit helped towards increased figures. There were a few cases of smallpox in Pyapon during the triennium, but none in Myaungmya. The increase in vaccination in these two districts is largely due to the appointment of wholetime Health Officers. Mergui district having been free from smallpox, the increase in vaccination speaks for the good work done by the District Health Officer and his staff.

Of the 12 districts reporting a decrease, Magwe (-21,799), shows the biggest reduction, followed by Minbu (-9,085), Shwebo (-7,822) and Toungoo (-6,884). The absence of severe smallpox in these districts largely accounts for the reduced vaccinations. It is regrettable that the vaccination figures fall on this account for it only means that the people are being lulled into a false sense of security and when next smallpox raises its head in these districts there will be many unfortunate people unable to resist its attack.

Shan States—The total number of vaccinations performed in the Shan States during the triennium shows an increase of 38,439. A total of 239,743 operations were performed during the triennium compared with 201,304 in the previous triennium.

3. Primary Vaccination—

Stat ment I.

Burma—A total of 1,667,758 primary operations was recorded compared with 1,509,796 during the last triennium—an increase of 157,962 operations.

An increase in tural and urban figures combined over those of the previous triennium was reported from 27 districts and a decrease from 11.

Of the 27 districts, the following 7 districts reported large increases:—Prome (+14,245), Bassein (+14,152), Myingyan (+12,939), Amherst (+12,680), Akyab (+12,458), Sagaing (+12,103), and Insein (+10,045). Considerable increases ranging between 5,000 and 10,000 were reported from 8 districts, viz., Mergui, Yamethin, Myaungmya, Chin Hills, Shwebo, Pyapon, Pegu and Upper Chindwin, the remaining 12 districts reporting increases below 5,000.

Of the 11 districts reporting decreases only Minbu district (-8,799) reported a decrease exceeding 5,000 operations.

SHAN STATES.—In the Federated Shan States, 183,449 primary operations were performed during the triennium compared with 177,604 during the last triennium—an increase of 5,845.

Statement I.

4. Successful Primary Vaccination—

Burma —Out of a total of 1,583,504 primary verified operations in the triennium, 1,532,817 were reported as successful (the total primary operations being 1,667,758, and the non-verified cases 84,254). Out of a total of 1,430,041 verified operations in the previous triennium, 1,361,350 were reported as successful (the total operations being 1,509,796 and non-verified operations 79,755). The percentage of success in primary known cases is therefore 96'80 for this triennium compared with 95'20 in the last.

A success rate of over 99 per cent in the year 1931-32 was recorded in Rangoon (99'29) and in the districts of Tharrawaddy (99'90), Prome (99'18), Henzada (100), Maubin (99'68), Kyaukse (99'31), and Bhamo (100). In the same year a success rate below 90 per cent was reported from the Hill District of Arakan (84'17), Kyaukpyu, (87'60), the Upper Chindwin (89'59) and the Lower Chindwin (89'20). The low success rate is to be ascribed to the length of time it takes the lymph to reach the vaccinators in the last named districts and the resulting loss of potency of the lymph.

Shan States—Out of a total of 60,529 known operations in the Shan States in 1931-32, 58,775 cases, or 97'10 per cent, were reported as successful, compared with 96'99 per cent in 1930-31 and 97'99 per cent in 1929-30.

Statement I.

5. Revaccination—

Burma—A total of 956,079 revaccinations was recorded during the triennium, compared with 842,990 during the previous triennium—an increase of 113,089 revaccinations. While this is to be regarded as satisfactory, there is still much room for improvement. The law which makes revaccination compulsory applies at present to only 8 districts. Until it is universally applicable and enforced we will be without one of the great defences against the recurrence of smallpox epidemics, which continue to beset this province.

An increase was reported from 21 districts and a decrease from 17. The biggest increases were in the districts of Akyab (+39,824), Meiktila (+33,490), Mandalay(+22,026), Sagaing (+17,858), Rangoon (+14,968) and Amherst (+13,051). The reasons for the increase in these places have been given in section 2. A large decrease was returned from the districts of Magwe (-21,407) and Shwebo (-14,150), the smaller incidence of smallpox being, as already stated, the cause of the fall.

Shan States—In the Federated Shan States, 56,294 revaccinations, were performed compared with 23,700—an increase of 32,594 operations. The health staff are to be congratulated on this.

6. Vaccination in Towns-

Burma—In the 74 towns to which the Vaccination Acts have been extended (there were 71 towns in the previous triennium), a total of 489,019 operations was performed compared with 400,450 in the previous three years. Of the total operations, 158,367 were primary and 330,652 revaccinations, compared with 147,536 and 252,914 respectively in the previous triennium. Therefore there was an increase of 10,831 in primary operations and of 77,738 in revaccinations during the triennium under review. The percentage of success for the triennium in primary vaccinations was 97.54 and in revaccinations 35.09, compared with 95.25 and 44.35 respectively in the previous three years.

In the year 1931-32, a total of 239,005 operations were performed, compared with 121,617 in 1930-31 and 128,397 in 1929-30. Of the 74 towns, 51 reported an increase and 23 a decrease in the year. The highest increase was reported from Rangoon (+103,392), followed by Insein (+3,557) and Letpadan (+3,434). On the other hand, Mandalay reported a large fall (-10,125), followed by Syriam (-1,670), Moulmein (-808), Kawkareik (-541) and Pyapon (-432). The decreases mainly occurred in revaccinations. Rangoon's large increase was the result of the severe outbreak of smallpox at the beginning of 1932, when many revaccinations were done.

Of the 239,005 operations, 59,240 were primary and 179,765 were revaccinations, and out of the total increase of 117,388, 10,300 were primary and 107,088 were revaccinations.

The percentage of successful cases in primary vaccination was 97.99 and in revaccination 35.03, compared with 97.78 and 36.67 respectively in the previous year.

Shan States—A total of 2,170 operations were performed in the three towns in the Shan States in 1931-32, compared with 1,602 in the previous year. The percentage of successful cases to total verified cases is 98'12 in primary and 47'49 in revaccinations.

7. Revaccination in Towns-

Appendix C.

Burma—It is gratifying to note that 20 towns out of the 74 in which the Vaccination Acts are in force have framed revaccination rules under Section 12A of the Burma Vaccination Law Amendment Act, 1909, as amended by the Burma Act IV of 1928.

Shan States—Taunggyi and Lashio reported an increase in revaccination during the year 1931-32, while Kalaw returned a decrease. The net increase for the States as a whole was 179.

Appendix B

8. Infant Vaccination in Towns-

Burma—In the year 1931-32, a total of 42,205 births and 11,527 deaths among infants under one year of age were registered in the 74 towns in which the Vaccination Acts are in force. The number of survivors according to these records is therefore 30,678. During the year, 33,290 infants under one year were successfully vaccinated—2,612 in excess of the recorded survivors.

The number of infants successfully vaccinated was in excess of the recorded survivors in 34 and below in 38 towns. In two towns the figures were the same.

A large excess of infant vaccinations over the available survivors was reported from Rangoon (+1,006), Pegu (+585), Mandalay (+529), Insein (+456) and Thayetmyo (+211).

The excess in Rangoon was partly due to the vaccination of 1,164 infants left unvaccinated below the survivors of the previous year. Pegu reported an excess of 146 in 1930-31 and 585 in 1931-32. One reason given for the latter excess is that owing to the rebellion there was a large influx of people into the town from the surrounding rural areas. Mandalay reported an excess of 1,077 last year and 529 this year. It was stated that the number of primary vaccinations included not only children born in Mandalay but also outside, who happened to come into the town. Insein reported an excess of 169 last year and 456 this year. Probably refugees from disturbed areas accounted for this year's excess. The excess in Thayetmyo was probably due to the same reason.

In eleven towns the number of infant vaccinations exceeded the number of births. These were Pegu, Insein, Thingangyun, Kanbe, Kamayut, Kyangin, Thayetmyo, Chauk, Myitnge, Yamethin and Myinmu. This excess is probably due to defective birth registration and in the cases of Pegu, Insein and Thayetmyo to the influx of families from the country districts during the rebellion.

On the other hand, the number of infants successfully vaccinated under one year was considerably below the number of recorded survivors in Myingyan (-259), Toungoo (-196), Mergui (-172), Pyu (-131), Thongwa (-122), Shwegyin (-120), Pakôkku (-102) and Thaton (-100). No satisfactory reasons were given except in the case of Toungoo where 123 infants were reported to have left the town. The vaccination state of these towns can only be considered as unsatisfactory when all these children remained unprotected at the end of the year.

Shan States—In the 3 notified towns, where the Vaccination Acts are in force, 571 births and 108 deaths were recorded. The number of

recorded survivors was therefore 463, compared with a figure of 340 shown as successfully vaccinated.

9. Dispensary Vaccination—

Burma—A total of 19,308 vaccinations were performed in hospitals and dispensaries (10,818 primary and 8,490 revaccinations) during the triennium, compared with 20,207 operations (14,321 primary and 5,886 revaccinations) during the previous triennium.

During the year 1931-32, a total of 2,660 primary and 4,286 revaccinations were performed compared with 3,810 and 1,004 in the previous year and 4,348 and 3,200 in 1929-30. Of the 2,660 primary cases, 1,200 were reported as successful and 1,354 as "result of unknown"; out of 4,286 revaccinations, 824 were returned as successful and 468 as unknown. The highest number of dispensary vaccinations was reported from Mandalay town (3,859), followed by Myitkyina district (1,312), Bassein district (364), Hill District of Arakan (343) and Tharrawaddy district (324).

SHAN STATES—A total of 2,593 vaccinations were reported from dispensaries in the Shan States for this triennium as against 3.652 in the last triennium.

Of 372 primary vaccinations done in 1931-32, 262 were reported as successful and 104 as unknown; out of 386 revaccinations in the same year, 221 were reported as successful and 151 as unknown.

10. Jail Vaccination—

Burma—In the Jails 44,836 prisoners were vaccinated in 1931-32, compared with 32,378 in the previous year and 30,386 in 1929-30. Of the 44,836 vaccinations, 1,970 were primary and 42,866 were revaccinations. Of the primary cases, 1,680 were successful, and of the revaccinations, 16,700 were successful. The percentage of success obtained in primary vaccination was therefore 85'28 and in revaccination 38'96 compared with 84'67 and 43'93 per cent respectively in the previous year and 70'44 and 49'77 per cent respectively in 1929-30.

SHAN STATES—No jail vaccination was reported from the Shan States for 1931-32.

11. Vaccination by Private Practitioners—

Burma—During the year 1931-32 medical practitioners performed 7,574 vaccinations in Burma, compared with 332 in 1930-31 and 877 in 1929-30. The very big increase is due to the epidemic in Rangoon which prevailed during the last three months of 1932, and in that time private practitioners performed a large number of vaccinations.

Summary of Statement I.

Of the 7,574 operations, 736 were primary and 6,838 were revaccinations; the percentage of success was 99'30 with primary and 46'81 with verified revaccination cases.

The total number of infants under one year successfully vaccinated by private practitioners was 179; between one and six years the figure was 409.

Shan States—Thirty-two primary vaccinations and 1 revaccination were reported as performed by private practitioners in the Shan States, compared with nil last year. All the primary cases were reported as successful.

12. Ship Vaccination—

Under the provisions of Section 9 of the Burma Vaccination Law Amendment Act of 1909, as amended by Burma Act IV of 1928, 165,990 ship vaccinations were performed in the ports of Rangoon and Akyab during the year 1931-32 compared with 194,534 in the previous year and 219,072 in 1929-30. The decrease is due to the smaller number of immigrants.

Rangoon port reported 156,537 and Akyab port 9,453 vaccinations. The results of these cannot be recorded, as passengers are allowed to proceed to their different destinations at once. There is no doubt that this large number of vaccinations at the ports goes a long way towards reducing the incidence of smallpox in Burma.

Statement IV

13. Verification Work of Inspecting Officers—

Burma—Of the total number of 894,704 persons vaccinated and revaccinated in Burma in the year 1931-32, the District and Assistant District Health Officers and Municipal Health Officers inspected the results of 86,157 or 9.63 per cent, compared with 12.89 per cent in 1930-31 and 11.33 per cent in 1929-30.

Of the total number of 539,503 primary vaccinations in 1931-32, inspectors of vaccination and other inspecting officers verified the result of 325,216 or 60'28 per cent, compared with 56'54 per cent in 1930-31 and 54'42 per cent in 1929-30; of a total of 355,201 revaccinations, they verified 152,616 persons or 42'97 per cent, compared with 49'38 per cent in 1930-31 and 44'66 per cent in 1929-30.

SHAN STATES—Of the 82,146 persons vaccinated and revaccinated in the Shan States during 1931-32, the District Health Officers verified the result of 5,680 or 6'91 per cent, compared with 7'14 per cent in 1930-31 and 14'55 per cent in 1929-30.

The percentages of verification work carried out by Inspectors of Vaccination and Head Vaccinators were 60'96 per cent in primary and 23'30 per cent in re-vaccinations, compared with 63'18 per cent and 45'00 per cent respectively in 1930-31 and 65'07 per cent and 26'49 per cent in 1929-30.

14. Establishment—The strength of the vaccination staff employed during the years of the last two triennial periods is shown in the table below:—

		District Superin-	Part-time vising (Inspec-	•	
Year.	Year. Province or State.		Sub- Assistant Sur-	Public Health In-	tors of Vaccina- tion	Head Vaccina- tors.	Vaccina- tors.
(1)	(2)	(3)	geons. (4)	spectors. (5)	(6)	(7)	(8)
1926-27 {	Burma Shan States	39	28	9	41		337 40
1927-28	Burma Shan States	39	28	11	42		344
1928-29 }	Burma Shan States	39 2	31	13	41	3	343 42
Average {	Burma Shan States	39	29	11	41	2	341 41
1929-30 {	Burma Shan States	39	31	13	38 2	3	350 42
1930-31 {	Burma Shan States	38 2	32	26	39	3	354 42
1931-32 {	Burma Shan States	38 2	32	37	39	3	355 42
Average {	Burma Shan States	38 2	32	25	39 2	3	353

It will be noted from this table that the staff has increased in the triennium.

The number of Sub-Assistant Surgeons receiving an allowance for supervision of vaccination remained the same in 1931-32 as in the previous year. The number of Public Health Inspectors supervising vaccination increased by 11—one each in the towns of Kyaukpyu, Maubin, Minbu, Salin, Kyauksè and Pyawbwè, six in the districts of Insein, less one in the district of Toungoo. The increase in the Insein district was due to the inclusion of four Public Health Inspectors employed in the Hlegu Rura! Health Unit area and to the employment of two Public Health Inspectors in the rest of the district on verification duty in addition to their ordinary sanitary duties.

There was an increase of one in the number of vaccinators.

To cope with epidemics of smallpox, 20 temporary vaccinators were employed by the Corporation of Rangoon during the latter part of 1931-32, one by the Akyab Municipal Committee for one month, one by the Moulmein Municipal Committee, one in Kyauksè district for one month and one in Hanthawaddy district for one month.

SHAN STATES—The Staff in the Shan States in 1931-32 remained the same as in the year 1930-31.

Statement II.

15. Cost of the Department—

Burma—The total cost of the Department in Burma, as shown in Statement II, is Rs. 4,26,707-6-8, compared with Rs. 4,26,525-9-4 in 1930-31 and Rs. 4,24,267-1-10 in 1929-30. The average cost of each successful case of vaccination is therefore Re. 0-11-10 as against Re. 0-11-10 in 1930-31 and Re. 0-11-2 in 1929-30. If, however, the sum of Rs. 36,145-5-0 credited to Government, on account of the sale in Burma of vaccine lymph, be deducted from the total expenditure of Rs. 4,26,707-6-8, the net cost of the Department is reduced to Rs. 3,90,562-1-8, compared with net figures of Rs. 3,85,206-7-4 in 1930-31 and Rs. 4,17,302-11-4 in 1929-30. The average cost of each successful case is therefore proportionately reduced to Re. 0-10-10 compared with Re. 0-10-7 in 1930-31 and Re. 0-10-11 in 1929-30.

High rates of average cost are reported from the following districts, viz., Hill District of Arakan (Rs. 1-7-9), Salween District (Rs. 1-6-9), Upper Chindwin (Rs. 1-2-5), Sandoway (Rs. 1-2-2), and Chin Hills (Rs. 1-0-9). The cost given for Rangoon is Rs. 1-3-0.

Travelling in the districts mentioned in the last paragraph is difficult and the population is widely scattered. These facts, together with the low success rate recorded partly owing to difficulties in verification, will necessarily produce a high figure of cost per successful vaccination.

SHAN STATES—The total cost of the Vaccination Department in the Federated Shan States, as shown in Statement II, was Rs. 39,114-11-0, as against Rs. 41,471-2-6 in 1930-31 and Rs. 39,671-5-6 in 1929-30. The cost per successful case of vaccination works out at nine annas four pies compared with eleven annas in 1930-31 and nine annas four pies in 1929-30.

16. Illegal inoculation against Smallpox—

Burma—In three districts, viz., Sagaing, Kyauksè and Meiktila, cases of illegal inoculation against smallpox were detected. This practice of inoculation is most dangerous as it may give rise to a severe outbreak of smallpox. Four inoculators were fined Rs. 10 each in Sagaing District. The offenders in Kyauksè and Meiktila districts have been prosecuted and the cases were still pending in court at the end of the period under review.

Shan States—No practice of inoculation was reported from the Shan States.

17. Prosecutions under the Vaccination Acts—

Burma—Prosecutions for infringement of the Vaccination Acts were reported from the towns of Rangoon and Mandalay and from the districts of Thatôn, Amherst, Mergui, Minbu and Myaungmya.

Of six prosecutions made in Rangoon four resulted in conviction, one in acquittal and one was withdrawn.

Under section 18 of the 1880 Act, 59 cases were sent up for trial in Mandalay town. The presiding magistrate passed orders for vaccination which were complied with.

There were 38 prosecutions in Thaton district. In two, fines were imposed, and in the rest, orders for vaccination were passed by the presiding magistrate.

In Amherst district, 13 prosecutions were made and the magistrate passed orders for vaccination which were complied with.

In Mergui district, 43 prosecutions were made. The magistrate has passed orders for vaccination in 33 cases, but 10 cases were still pending at the time of report.

In Minbu, 104 persons were prosecuted and fines totalling Rs. 77 were inflicted.

In Myaungmya, 59 persons were prosecuted. The magistrate passed orders for the vaccination of the children concerned and these were complied with.

Shan States.—No prosecution was reported from the States.

18. Vaccine Depot, Meiktila—The construction of a new operation theatre and operation stable was completed in 1931-32.

OUTPUT OF LYMPH—One hundred and eighty cow calves and 13 buffalo calves were vaccinated during 1931-32. Three cow calves failed to take. The following table shows the output and issue of lymph during the years of the last two triennial periods:—

		Total	yield.	Averag per o		Doses
Year.	Number of calves.	Oz.	Grms.	Grms.	Grains.	issued.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1926-27	485 cow calves	411.43	11,664	24.05	370.36	974 ,2 29
1927-28	387 cow calves	404·33 47·26	11,463	29.62 134.00	457:09	1,136,232
1928-29	363 cow calves 15 buffalo calves	464·80 62·65	13,177 1,776	36·30 118·40	2,069 [.] 88 516 [.] 18 1,8 2 7 [.] 14	1,376,338
Total	1,235 cow calves 25 buffalo calves	1,280 [.] 56 109 [.] 91	36,304 3,116	29·40 124·64		3,486,799
1929-30	297 cow calves	484.34	13,731	46.23	713.42	1,443,058
1930-31	13 buffalo calves 223 cow calves 22 buffalo calves	57·24 382·36 · 97·56	1,623 10,840 2,766	124.84 48.61 125.72	1,926.53 749.89 1,940.11	1,219,197
1931-32	180 cow calves 13 buffalo calves	355·87 58·48	10,089	56.05	864 [.] 96 1,967 [.] 06	1,352,382
Total	700 cow calves 48 buffalo calves	1;222:57 213:28	34,657 6,047	49·51 125·98		4,014,637

It will be seen that there is a steady increase in the average yield per calf from year to year during the last six years. The average yield per cow calf in 1930-31 and 1931-32 is double that of 1926-27. Studying the table again, it will be found that to obtain 36,304 grammes of lymph it was necessary in the last triennium to vaccinate 1,235 cow calves, whereas to obtain almost the same quantity of lymph (i.e. 34,657), it has been found necessary in this triennium to vaccinate only 700 cow calves, so about 500 calves were saved. This satisfactory progress is to be attributed to the gradual modernization of the Depôt, beginning with the year 1927. On 1st March 1927, a wholetime Director was appointed and was deputed to study the technique in lymph manufacture at the King's Institute, Guindy, Madras. Various improvements were carried out to the Depôt, such as the provision of a small bacteriological laboratory, a Benoid gas plant, a better system of watersupply, an ice-plant, an experimental animal house, a post-scraping stable, a Lister oil engine. Previously, the supply of calves was uncertain and at times it failed altogether. The Depôt has overcome these difficulties by resorting to a system of hiring calves from a contractor, and the supply has proved certain and regular. A sufficient supply of calves enabled the Director of the Depôt to vaccinate as many calves as could be accommodated in the cold weather months, when the yield is generally at its maximum. Another important factor that helped to increase the average yield of lymph was a reduction in the number of cows that did not take or that yielded poor quality of lymph. There were 33 cow calves of this description in 1926-27, 18 in 1927-28, 5 (also 4 buffalo calves) in 1928-29, 6 in 1929-30, 4 in 1930-31 and 3 only in 1931-32. This was probably due to more thorough isolation of unvaccinated calves and to the hire system of calves resorted to, which enabled the Director to take only healthy calves that were of suitable colour, size, etc.

In 1931-32 there was an opening balance of 5,157 grammes of lymph carried over from the previous year, and 11,747 grammes were manufactured during the year. Of this total of 16,904 grammes of lymph, 12,717 grammes were issued during the year, 687 grammes were used as seed-lymph and a closing balance of 3,500 grammes has been carried over to the year 1932-33.

TECHNIQUE—The seed lymph was passed through the modified Nijland cycle (rabbit - cow calf - buffalo calf - rabbit). All lymph issued was subjected to Cunningham's potency test on cow calves and the Calmette Guerin potency test on rabbits. In addition, at least three children were vaccinated with each lymph and gave an insertion success of 100 per cent before the lymph was issued.

Supply of Lymph—Of the 1,352,382 doses of lymph issued, 1,295,715 were supplied to local bodies on payment, and the balance of 56,667

doses to Government institutions free of charge as follows:—5,427 to Military, 36,933 to Jails, 11,100 to Government Vaccinators in the Chin Hills District, 195 to the Public Works Department at Nyaunggyat, 2,244 to the Senior Medical Officer, Port Blair, 201 to the Medical Officer, Port Borington, 15 to the British Military Hospital, Port Blair, 261 to the Superintendent, Mental Hospital, Tadagale, and 291 to the Medical Officer, Borstal Training School, Thayetmyo.

During the triennium, 527,838 more doses of lymph were issued than in the last triennium. This is in keeping with the increased number of operations.

RESULTS—Of 285,263 cases of primary vaccination in 1931-32, the results of which were reported to the Depôt, a success rate of 95'82 per cent was obtained as against 97'50 per cent in 1930-31. For 91,871 revaccinations reported, the percentage of success was 36'32, compared with 31'20 per cent in the previous year.

DRY LYMPH—A total of 1,700 doses of dry lymph were sent to Mawlaik, Falam, Loimwe, Hlegu and Andaman Islands. The results, so far reported, from the use of this lymph are rather unfavourable. The dry lymph when used appears to be less potent than the ordinary lymph; the process of drying seems to destroy a large amount of the virus, and the necessity of its being mixed with glycerine by vaccinators exposes it to contamination.

FINANCE—The total maintenance expenditure of the Depôt for the year 1931-32 was Rs. 36,901-1-6 and the total net income was Rs. 39,980-8-0, including Rs. 7,328-2-0, balance of the sale proceeds of vaccine lymph outstanding on the 31st March 1931, but excluding Rs. 6,871-7-0 balance of the sale proceeds of lymph outstanding on the 31st March 1932. The net profit after adjustment therefore is Rs. 2,622-11-6.

Of the total expenditure of Rs. 36,901-1-6, a sum of Rs. 16,965-10-0 was expended on establishment, Rs. 7,286-9-0 on medicines and instruments, Rs. 7,967-12-6 on contingencies, Rs. 2,152-0-0 on hire and Rs. 1,407-0-0 on feeding of calves, Rs. 797-8-0 on service postage and telegrams, and Rs. 324-10-0 on petty constructions and repairs.

- 19. Training Class—Thirty-eight student vaccinators were trained at Meiktila Vaccine Depôt during 1931-32 and 36 passed the qualifying examination. Twenty-three students undergoing the course of training for Public Health Inspectors were also given training in vaccination at the Depôt and twenty-two passed the qualifying examination. Owing to the large number of unemployed vaccinators, the October-December and January-March sessions were not held.
- 20. General Remarks—Mr. G. H. Blaker, I.M.D., was the Director and U Myat Maung, the Assistant Director of the Depôt

throughout the year. The Depôt was visited by me during the year, and I was very pleased with the progress made there and with the high standard of professional work.

Several improvements are held up owing to financial stringency. They include the scheme for converting the old operation stable into menial quarters, the construction of a Kentucky septic tank latrine, and the building of a quarantine stable.

E. COTTER, Major, I.M.S., Offg. Director of Public Health, Burma.

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A.—VACCINATION
STATEMENT No. I—Showing the particulars of Vaccination in the

No.	Divisions and Districts.		Population of districts according to Census of 1931.	Average population per square mile.	Average number of vaccinators employed throughout the year.	Total number of persons vaccinated.		
	ARAKAN DIVISION.))		Males.	Females.	Total.
1 2 3	Akyab District Rural Urban Hill District of Arakan Kyaukpyu District Rural Urban Sandoway District Rural Urban		637,580 597,242 40,338 21,418 220,292 216,060 4,232 129,245 125,175 4,070	124 14 50 34	12 10 2 3 6 6 3 3	24,877 17,509 7,368 1,712 7,296 7,175 121 3,329 2,854 475	16,386 15,569 817 1,120 6,683 6,605 78 3,076 2,687 389	41,263 33,078 8,185 2,832 13,979 13,780 199 6,405 5,541 864
	Pegu Division.							
5 6	Rangoon Pegu District Rural	•••	400,415 489,969 460,467	5,200 120	22 9 7	99,080 13,936 10,998	29,128 13,549 11,538	128,208 27,485 22,536
7	Urban Tharrawaddy District Rural	•••	29,502 508,319 457,007	178	2 16 10	2,938 13,004 10,110	2,011 13,834 10,942	4,949 26,838 21,052
8	Urban Hanthawaddy District Rural	•••	51,312 408,831 384,785	219	6 10 7	2,894 14,764 11,129	2,892 11,158 10,031	5,786 25,922 21,160
9	Urban Insein District Rural Urban	•••	24,046 331,452 283,505	174	3 9 6 3	3,635 15,3 37 11,8 2 3 3,514	1,127 15,909 11,644 4,265	4,762 31,246 23,467 7,779
10	Prome District Rural Urban	•••	47,947 410,651 360,469 50,182	141	14 10 4	16,289 13,105 3,184	15,471 13,371	31,760 26,476 5,284
	IRRAWADDY DIVISION.			,				
11	Bassein District Rural Urban	•••	571,043 514,135 56,908	138	15 11 4	17,051 14,541 2,510	17,177 15,173 2,004	34, 22 8 29,714 4,514

* Secondary
† Work done by other

DEPARTMENT.

Province of Burma during the year 1931-32:

of persons	vaccinated by each vaccinator.	,			Prii	nary \	accination.					
number	l'by ea					Succ	essful.				N	0.
Average n	vaccinated tor.	To	tal.		ider year.	One and under six years.		Total of all ages.	Unknown.			
	(7)		8) 1		(9)		(10)	(11)	(12)	(1	1) 1
	3,439 3,308 4,093 830 2,326 2,297 2,135 1,847	† †	18,973 17,667 1,306 1,343 10,944 10,782 162 3,815 3,613 202		3,420 2,902 518 18 1,654 1,594 60 1,161 1,087 74		10,580 10,366 214 462 4,699 4,656 43 1,518 1,462 56	17,372 16,273 1,099 1,069 8,985 8,873 112 3,245 3,087 158		816 643 173 73 687 672 15 368 351 17		1 2 3 4
	5,539 3,054 3,219 2,475 1,657 2,105 910 2,592 3,023 1,587 3,365 3,832 2,431 2,269 2,648 1,321	+ +	13,482 18,916 16,241 2,675 18,541 16,095 2,446 18,587 17,917 670 18,170 15,287 † 2,883 25,329 23,456 1,873	+	7,056 6,110 4,674 1,436 5,614 4,564 1,050 5,762 5,404 358 5,083 3,749 1,334 8,846 7,462 1,384		3,220 8,764 8,244 520 10,541 9,670 871 10,217 9,922 295 9,016 7,514 1,502 14,453 14,064 389	10,871 17,099 14,898 2,201 18,163 15,831 2,332 17,887 17,222 665 17,137 14,257 2,880 24,777 22,962 1,815		2,533 1,632 1,335 297 359 263 96 457 457 666 663 3 348 308 40	,	5 6 7 8 9
	2,258 2,668 1,129		26,892 24,083 2,809	2	4,803 3,263 1,540	,	14,608 13,791 817	2 5,774 2 3,069 2 ,705		574 498 76		11

operations included.:
agencies and Dispensaries included.

A.—VACCINATION
STATEMENT No. I—Showing the particulars of Vaccination in the

			Re	-vaccination	1.	Percentag cessful which th were k	cases in	Persons success* fully
No.	Divisions and Districts.		Total.	Successful.	Unknown.	Primary.	Re- vaccina- tion.	vacci- nated per 1,000 of popula- tion.
(1)	(2)		(13)	(14)	(15)	(16)	(17)	(18)
1	ARAKAN DIVISION. Akyab District Rural Urban		22,290 15,411 6,879	4,04 6 1,480 2,566	3,059 1,044 2,015	95.68 95.59 9 7 .00	21.04 10.30 52.75	33·59 29·72 90·86
2 3	Hill District of Arakan Kyaukpyu District Rural Urban Sandoway District Rural Urban	•••	† 1,489 3,035 2,998 † 37 2,590 1,928 662	709 954 935 19 132 77 55	180 376 374 2 739 480 259	84·17 87·60 87·76 76·19 94·14 94·64 85·41	54·16 35·88 35·63 54·29 7.13 5·32 13·65	83.01 45.12 45.39 30.95 26.13 25.28 52.33
5 6 7 8	PEGU DIVISION. Rangoon Pegu District Rural Urban Tharrawaddy District Rural Urban Hanthawaddy District Rural Hanthawaddy District Rural Urban Insein District	•••	+114,726 8,569 6,295 2,274 8,297 4,957 +3,340 7,335 3,243 4,092 13,076	17,693 1,380 518 862 2,890 1,453 1,437 1,363 653 710 3,331	60,989 2,302 1,961 341 2,206 1,549 657 286 173 113 3,304	99·29 98·93 99·95 92·56 99·90 99·23 98·66 98·64 99·25 97·90	32·93 22·02 11·95 44·59 47·45 42·63 53·56 19·34 21·27 17·84 34·09	71.34 37.71 33.48 103.82 41.42 37.82 73.45 47.09 46.45 57.18 61.75
10	Rural Urban Prome District Rural Urban IRRAWADDY DIVISION. Bassein District	•••	† 8,180 † 4,896 6,431 3,020 3,411	1,965 1,366 2,423 593 1,830	1,883 1,421 921 477 444	97·49 100·00 99·18 99·20 99·02	31·21 39·31 43·97 23·32 61·68	57.22 88.56 66.24 65.35 72.64
11	Rural Urban	•••	† 5,631 1,705	1,501 504	1,308 1,308 258	97 93 97·81 98·98	34·72 34·83	4 7 ·79 56·39

† Work done by other

DEPARTMENT.

Province of Burma during the year 1931-32—contd.

Percentage of to total	inknown cases I cases.	Average annu persons su vaccinated du five y	ccessfully ring previous	Average annu deaths from during p five ye	small - pox revious	
Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	No
(19)	(20)	(21)	(22)	(23)	(24)	(1)
4·30 3·64 13·25 5·44 6·28 6·23 9·26 9·65 9·71 8·42	13.72 6.77 29.29 12.09 12.39 12.47 5.41 28.53 24.90 39.12	31,457 1,653 8,488 3,437 	54·5 7 79·04 42·46 30·68	288 6 6	0·50 0·03 	1 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
18:79 8:63 8:22 11:10 1:94 1:63 3:92 2:46 2:55 3:67 4:34 0:10 1:37 1:31 2:14	53·16 26·86 31·15 15·00 26·59 31·25 19·67 3·90 5·33 2·76 25·27 23·02 29·02 14·32 15·79 13·02	18,903 17,846 24,426 16,436 12,186 25,530	54·71 40·05 49·60 45·08 42·09 68·71	130 76 18 29 30 96	0°38 0°17 0°04 0°08 0°10 	5° 6 7 8 9° 10°
2·13 2·07 2·71	21·35 23·23 15·13	22,575 	46 ⁻ 12	 	0.03	11

agencies and Dispensaries included.

A.—VACCINATION STATEMENT No. I—Showing the particulars of Vaccination in the

No.	Divisions and Districts.	Population of districts according to Census of 1931.	Average population per square mile.	Average number of vaccinators constructions employed throughout the year.	Total	ersons	
	IRRAWADDY DIVISION—concld.				Males.	Females.	Total.
12	Henzada District Rural Urban	613,280 568,886 44,394	214	15 12 3	14,530 13,535 995	15,530 14,425 1,105	30,060 27,960 2,100
13	Myaungmya District Rural Urban Maubin District	444,784 419,905 24,879 371,509	150 227	15 12 3 12	17,370 15,041 2,329 13,684	18,280 16,391 1,889 13,592	35,650 31,432 4,218 27,276
15	Rural Urban Pyapon District	346,353 25,156 334,158	156	9 3 10	12,092 1,592 11,937	12,6 2 8 96 4 12,5 4 7 12,021	24,720 2,556 24,484
	Rural Urban	311,162 22,996	::: Ī	8 2	11,254 683	526	23,275 1,209
	TENASSERIM DIVISION.						
16 17	Salween District Thaton District Rural	53,186 532,628 509,166 23,462	20 109 	4 13 12 1	4,401 13,690 13,038 652	2,895 13,974 13,654 310	7,296 27,664 26,702 962
18	Urban Amherst District Rural Urban	516,233 444,152 72,081	73	11 8 3	16,678 12,552 4,126	15,476 12,931 2,545	32,154 25,483 6,671
19	Tavoy District Rural Urban	179,964 150,946 29,018	34	6 4 2 5	4,320 3,461 859	4,641 4,061 580	8,961 7,522 1,439
.20	Mergui District Rural Urban	161,987 141,582 20,405		4	6,463 4,912 1,551	5,389 4,681 708	11,852 9,593 2,259
.21	Toungoo District Rural Urban	428,670 391,764 36,906	70	13 10 3	11,727 10,480 1,247	11,431 10,217 1,214	23,158 20,697 2,461
	MAGWE DIVISION.				4 20 2		
22	Thayetmyo District Rural Urban	274,177 252,387 21,790		8 6 2	4,787 3,609 1,178	4,797 3,907 890	9,584 7 ,516 2,068
23	Minbu District Rural Urban	277,876 265,217 12,659	84	6 5 1	4,802 4,535 267	5,054 4,803 251	9,856 9,338 518
1							

* Secondary

† Work done by other

DEPARTMENT.

Province of Burma during the year 1931-32—contd.

	each vaccina-			Pri	imary Vaccination	1.		
31 1	number d by e				Successful.		·	
	Average vaccinate for.		Total.	Under one year.	One and under six years.	Total of all ages.	Unknown.	
1-	(7),			(9)	(10).	(11)	12)	(1)
	2,004 2,330 700 2,355 2,593 1,406 2,268 2,747 832 2,448 2,909 605		27,613 26,347 1,266 23,534 †21,699 1,835 21,772 *20,524 1,248 17,459 *16,639 *820	8,510 7,412 1,098 3,197 2,584 613 4,174 3,566 608 3,665 3,286 379	16,019 15,902 117 12,643 11,814 829 13,889 13,432 457 13,221 12,872 349	26,952 25,687 1,265 21,997 20,175 1,822 21,127 19,940 1,187 16,917 16,158 759	660 660 1,175 1,163 12 577 523 54 295 235 60	12 13 14 15
	1,824 2,128 2,225 962 2,920 3,181 2,224 1,494 1,881 720 2,370 2,398 2,259 1,781 2,070 820		*4,031 17,537 16,928 609 20,698 †18,937 *1,761 8,091 7,168 923 9,649 8,602 1,047 14,350 12,095 *1,445	116 5,740 5,253 487 5,584 3,934 1,650 5,390 4,546 844 1,088 756 332 2,959 2,479 480	479 8,462 8,414 48 8,773 8,755 18 2,508 2,459 49 4,292 4,037 255 7,916 7,108 808	2,956 16,228 15,662 566 19,332 17,650 1,682 7,923 7,021 902 8,791 7,813 978 13,920 12,527 1,393	971 988 961 27 1,066 1,062 4 9 9 607 583 24 267 246 21	16 17 18 19 20 21
	1,198 1,253 1,034 1,643 1,868 518		7,809 6,611 *1,198 10,019 *9,520 499	2,824 2,131 693 2,292 2,109 183	4,25 2 ; 3,832 ; 420 ; 7,150 ; 6,859 ; 291 ;	7,463 6,350. 1,113 9,668. 9,194. 474	159 139 20 205 191 14	22

operations included.
agencies and Dispensaries included.

A.—VACCINATION
STATEMENT No. I—Showing the particulars of Vaccination in the

		Re	Re-vaccination.			Percentage of successful cases in which the results were known.		
No.	Divisions and I	Districts.	Total.	Successful.	Unknown.	Primary.	Re- vaccina- tion	vacci- nated per 1,000 of popula• tion.
(1)	(2)		(13)	(14)	(15)	(16)	(17)	(18)
12 13 14 15	Urban Maubin District Rural Urban Pyapon District Rural	•••	2,447 1,613 834 12,116 † 9,733 2,383 5,521 4,213 † 1,308 7,252 6,863 389	267 209 58 2,472 2,026 446 566 298 268 1,050 999 51	1,404 1,404 1,834 1,789 45 468 343 125 631 567 64	100·00 100·00 99·92 98·38 98·24 99·95 99·68 99·70 99·41 98·56 98·50 99·87	25.60 100.00 6.95 24.04 25.50 19.08 11.20 7.70 22.65 15.86 15.87 15.69	44·38· 45·52 29·80 55·01 52·87· 91·16 58·39 58·43 57·84 53·77 55·14 35·22
16 17 18 19 20 21	TENASSERIM Salween District Thaton District Rural Urban Amherst District Rural Urban Tavoy District Rural Urban Mergui District Rural Urban Toungoo D ₁ strict Rural Urban		* 3,301 10,127 . 9,774 . 353 11,463 6,546 4,917 870 354 516 2,203 991 1,212 8,812 7,792 1,020	748 1,838 1,653 185 2,089 555 1,534 575 272 303 928 332 596 1,327 1,083 244	897 1,319 1,274 45 1,275 774 501 38 15 23 195 69 126 773 737 36	96.60 98.06 98.09 97.25 98.47 98.74 95.73 98.03 98.07 97.72 97.22 97.43 95.60 98.84 98.96 97.82	31°11 20°87 19°45 60°06 20°50 9°62 34°74 69°11 80°24 61°46 46°22 36°01 54°88 16°51 15°35 24°80	69.64 33.92 34.01 32.01 41.49 40.99 44.62 47.22 48.32 41.53 60.00 57.53 77.14 35.57 34.74 44.36
22	Magwe D Thayetmyo Distr Rural Urban Minbu District Rural Urban		1,805 905 900 32 13 19	248 333 16 2	245 10 235 1 1	97·56 98·11 94·48 98·51 98·55 97·73	37·24 27·71 50·08 51·61 16·67 73·68	29·34 26·14 66·36 34·85 34·67 38·55

* Secondary
† Work done by other

DEPARTMENT.

Province of Burma during the year 1931-32—contd.

	Percentage of unknown cases to total cases.			Average annu persons su vaccinated du five y	ccessfully ring previous	Average annu deaths fron during p five y	No.		
	Primary. Re-vaccination.		Number. Ratio per 1,000.		Number,	Ratio per 1,000.			
	(19)		(20)	(21)	(22)	(23)	(24)	(1)	
	2·39 2·51		57·38 87·04	27,861	50:57	34	0.06	12	
	4·99 5·36 0·65		15·14 18·38 1·89	25,590 	 69: 0 6	2	0.01	13	
	2·65 2·55		8 [.] 48 8 [.] 14	20,454	61.96	20	()· 0 6	14	
	4·33 1·69 1·41		9.56 8.70 8.26	 19,871 	68.76	33	0.12	15	
	7.32		16.45						
	24·09 5·63 5·68		27·17 13·02 13·03	4,090 18,983	81·19 40·30	47		16 17	
	4·43 5·15 5·61		12·75 11·12	24,390	58.36		··· 0·27	18	
	0°23 0°11		11.82 10.19 4.37	 7,613	 48 [.] 56	 1		19	
	0·13 6·29		4·24 4·46 8·85	 6,227	 45 [.] 97	•••		20	
I	6:78 2:29 1:86		6 [.] 96 10 [.] 40 8 [.] 77	 17,070	 44 [.] 70	147	 3·84	21	
I	2.03 1.45		9·46 3·53	••• '	•••				
	2·04 2·10		13.57 1.10	10,303	40.34	45	0.18	22	
	1.67 2.05 2.01 2.81		26·11 3·13 7·69	10,077	 36 [.] 74 	1 ,	 0.00	23	
1	•								

operations included.
agencies and Dispensaries included.

A.—VACCINATION
STATEMENT No. I—Showing the particulars of Vaccination in the

No.	Divisions and Districts.	Population of districts according to Census of 1931.	Average population per square mile.	Average number of vaccinators comployed throughout the year.	Tota	persons	
. 24 25 - 26	Magwe Division—concld. Magwe District Rural Urban Pakôkku District Rural Urban Chin Hills District	499,573 459,097 40,476 499,181 476,066 23,115 171,237	135 80 16	11 7 4 9 8 1 6	9,811 8,852 959 9,685 9,348 337 5,592	8,440 7,497 943 9,730 9,337 393 4,674	Total. 18,251 16,349 1,902: 19,415 18,685 730 10,266
27 28 29 30 31	Mandalay Division. Mandalay District Rural Urban Kyauksè District Rural Urban Meiktila District Rural Urban Myingyan District Rural Urban Yamèthin District Rural Urban	371,636 196,687 174,949 151,320 143,967 7,353 309,999 300,804 9,195 472,557 438,982 33,575 390,820 357,713 33,107	174 118 140 173 97	11 5 6 5 4 1 7 6 1 12 10 2 7 5 2	20,412 4,666 15,746 4,537 4,285 252 9,890 9,485 405 10,427 9,768 659 12,828 9,821 3,007	15,932 5,133 10,799 4,669 4,401 268 11,866 11,511 355 10,500 9,826 674 13,079 11,199 1,880	36,344 9,799 26,545 9,206 8,686 520 21,756 20,996 760 20,927 19,594 1,333 25,907 21,020 4,887
32 33 34	SAGAING DIVISION. Bhamo District Rural Urban Myitkyina District Rural Urban Shwebo District Rural Urban	121,193 113,366 7,827 171,524 164,196 7,328 446,790 431,765 15,025	 14 80	4 3 1 4 3 1 13 11 2	2,140 1,848 292 2,883 2,601 282 11,329 10,758 571	1,986 1,675 311 2,354 2,145 209 12,534 12,067 467	4,126 3,523 603 5,237 4,746 491 23,863 22,825 1,038

* Secondary
† Dispensary Vaccination and work

DEPARTMENT.

Province of Burma during the year 1931-32—contd.

	Average number of persons vaccinated by each vaccinator.	·	Pri	imary Vaccination	n.			
	numbe			Successful.			No.	
		Total.	Under one year.	One and under six years.	Total of all ages.	Unknown.		
-	(7)	(8)	(9)	(10)	(11)	(12)	(1)	
	1,659 2,335 476 2,157 2,336 730 1,711	14,051 † 12,587 1,464 16,274 15,585 689 * 8,791	6,589 5,915 674 6,736 6,316 420 106	7,028 6,296 732 7,045 6,907 138 4,305	13,618 12,212 1,406 14,451 13,825 626 7,015	278 236 42 609 573 36 205	24 25 26	
	2,953 1,960 3,781 1,841 2,172 520 3,089 3,499 626 1,744 1,959 667 3,701 4,204 2,444	15,880 * 7,028 * † 8,852 5,544 * 5,242 302 9,283 8,831 † 452 18,930 * 17,835 1,095 16,518 14,641 1,877	8,409 2,095 6,314 3,027 2,762 265 2,446 2,139 307 8,093 7,633 460 6,188 5,179 1,009	5,770 3,509 2,261 2,231 2,200 31 4,519 4,423 96 6,218 5,988 230 7,286 6,664 622	14,867 6,142 8,725 5,333 5,037 296 7,474 7,067 407 15,198 14,421 777 14,449 12,747 1,702	587 587 174 169 5 1,158 1,124 34 2,554 2,301 253 1,567 1,460 107	27 28 29 30 31.	
	965 1,085 603 981 1,145 491 1,836 2,075 519	3,585 † 3,186 399 4,208 † 3,805 403 19,096 18,309 787	486 326 160 439 305 134 5,679 5,132 547	1,765 1,552 213 1,428 1,248 180 10,684 10,516 168	2,723 2,345 378 2,459 2,071 388 17,587 16,849 738	862 841 21 1,593 1,581 12 649 626 23	32 33 34	

operations included.
done by other Agencies included.

A.—VACCINATION
STATEMENT No. I—Showing the particulars of Vaccination in the

		,	Re-vaccination	n.	Percentage of successful cases in which the results were known.		Persons success- fully vacci-	
No.	Divisions and Districts.	Total.	Successful.	Unknown.	Primary.	Re- vaccina- tion.	nated per 1,000 of popula- tion.	
(1)	(2)	(13)	(14)	(15)	(16)	(17)	(18)	
24	11118	4,200		1,275	98.87	11:56	27.94	
25	Urban Pakôkku District Rural Urban	3,762 438 3,144 3,100 41 1,482	68 425 421 4	1,226 49 142 115 27 97	98.87 98.87 92.25 92.09 95.87 81.70	10.65 17.48 14.17 14.10 28.57 37.83	27·19 36·42 29·80 29·92 27·26 44·03	
	MANDALAY DIVISION.							
27 28	Rural Urban Kyauksè District Rural	20,710 2,96. † 17,75 3,670 * 3,450 21	1,175 5,416 0 1,359 1,260	526 504 22 785 700 85	97·21 95·36 98·57 99·31 99·29 99·66	32.64 47.74 30.55 47.11 45.78 74.44	57.74 37.20 80.83 44.22 43.74 53.72	
.2 9	Meiktila District Rural Urban	12,47 12,16 † 30 2,14	3,093 5,060 8 33 0 305	2,276 2,086 190 558	91·99 91·70 97·37 92·81	30·33 30·36 27·97 19·28	34·09 33·67 47·85 32·81	
31	Rural Urban Yamèthin District Rural	1,90 23 9,38 6,37 3,01	8 13 9 2,778 9 1,937	458 100 3,419 2,261 1,158	92.84 92.28 96.64 96.71 96.16	20°22 9°42 46°53 47°04 45°41	33.52 23.53 44.08 41.05 76.81	
	SAGAING DIVISION.							
32	Rural	† 33	7 203	247 134 113	100.00	100.00	24.89 22.48 50:02	
33	Myitkyina District Rural	20 1,02 1,94	9 559	257 253 4	100.00 94.03 93.12 99.23	100.00 72.41 70.35 89.29	59.92 17.60 15.56 63.18	
34	Shwebo District Rural	4,76 4,51 25	7 2, 392 6 2,298	381 360 21	95·34 95·28 96·60	54·54 55·29 40· 8 7	44·72 44·35 55·37	

† Dispensary Vaccination and work

DEPARTMENT.

Province of Burma during the year 1931-32—contd.

Percentages of to total	unknown cases' cases.	Average annu persons su vaccinated du five y	ring previous	Average annual number of deaths from small-pox during previous five years.				
Primary. Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	:	No.	
(19)	(20)	(21)	(22)	(23)	(24)		(1)	
1.98 1.87 2.87 3.74 3.68 5.22 2.33	30·36 32·59 11·19 4·52 3·71 65·85 6·55	17,933 13,357 6,368	42·37 28·68 48·94	88 55 	0.21		24 25 26	
8·35 3·14 3·22 1·66 12·47 12·73 7·52 13·49 12·90 23·11 9·49 9·97 5·70	17:00 0:12 21:39 20:28 38:99 18:25 17:15 61:69 26:07 24:08 42:02 36:41 35:44 38:47	6,991 10,781 14,316 17,996	37·19 32·39 55·68	12 16 295 58	0·08 0·05 0·67 0·18		28 29 30 31	
 24·04 26·40 5·26 37·86 41·55 2·98 3·40 3·42 2·92	45.66 39.76 55.39 24.98 26.89 4.55 7.99 7.97 8.37	3,407 3,100 18,187 	30·16 21·22 47·30 	 59	 0.15		32 33 34	

operations included. done by other Agencies included.

A.—VACCINATION

ISTATEMENT No. I—Showing the particulars of Vaccination in

No.	Divisions and Dis	Population of districts according to Census of 1931.	Average population per Square mile.	Average number of vaccinators tors employed throughout the year.	Total number of persons vaccinated.			
	SAGAING DIVISION	N could				Male.	Female.	Total.
35	Sagaing District Rural Urban		335,965 316,766 19,199	184	8 6 2	15,615 14,446 1,169	20,083 18,845 1,238	35,698 33,291 2,407
3 6 37	Katha District Upper Chindwin D Rural	oistrict	254,170 204,982 202,704 2,278	33 13	6 7 7	6,333 6,421 6,315 106	6,944 6,008 5,944 64	13,277 12,429 12,259 170
3 8	Urban Lower Chindwin I Rural Urban	District	383,434 372,634 10,800	107	8 7 1	9,395 9,104 291	10,446 10,210 236	19,841 19,314 527
	Total for 193	31-32	13,102,048	76	355	488,362	406,342	894,704
	R	Rural	11,675,123		261	323,088	332,712	655.800
	U	rban	1,426,925	•••	94	165,274	73,630	238,904
	Total for 193	30-31	11,698,408	68	354	423.982	400,206	824,188
	R	Rural	10,438,758	•••	259	347.677	354,684	702,361
	U	rban	1,259,650		95	76,305	45,522	121,827
	Total for 192	29-30	11,698,408	68	350	468,508	431,777	900,285
	F	Rural	10.438,758		256	380,550	390,958	771,508
	U	rban	1,259,650	•••	94	87,958	40,819	128,777
1	FEDERATED SHA		(2(107	2.0	20	10.054	10.012	25.475
	Northern Shan Sta	ites	636,107	32	20 20	18,954 18,476	18,213 17,969	37,167 36,445
	Urban		4,638	23	22	478 23,339	244 21,640	722 44,979
	Southern Shan Sta Rural	tes •••	928,991 916,718		20	22,458	21,073	43,531
	Urban	• • • •	12,273		2	881	567	1,448
	Total for 193		1,565,098	26	42	42,293	39,853	82,146
		Rural	1,548,187	•••	40	40,934	39,042	79,976
		rban	16,911		2	1,359	811	2,170
	Total for 193		1,470,691	24	42	38,053	35,556	73,609
		Rural	1,457,057		40	37,110	34,897	72,007
		rban ,	13,634	•••	2	943	659	1,602
	Total for 192	Dirmo1	1,470,691	24	42	48,518	35,470	83,988
		Rural Irban	1,457,057		41	48,074	35,267	83,341
		rban	13,634	•••	1	444	203	647

* Secondary
† Dispensary Vaccination and work

DEPARTMENT.

the Province of Burma during the year 1931-32—contd.

Average number of persons vaccinated by each vaccinator.	Primary Vaccination.											
nunıbe d by e			Successful.			No.						
Average number vaccinated by eactor.	Total.	Under one year.	One and under six years.	Total of all ages.	Unknown.							
(7)	(8)	(9)	(10)	(11)	(12)	(1)						
4,462 5,549 1,204 2,213 1,752 1,727 2,480 2,759 527 2,479 2,500 2,409 2 314 2,694 1,273 2,549 2,987 1,351	19,289 18,062 1,227 * 11,844 8,429 † 8,271 158 11,589 * 11,213 * 376 *† 540,865 *† 481,625 *† 59,240	8,363 7,826 537 2,139 1,740 1,730 10 5,330 5,054 276 161,576 127,546 34,030 163,223 132,917 30,306 162,168 131,634 30,534	9,798 9,144 654 7,404 4,317 4,290 27 4,361 4,301 60 271,101 254,861 16,240 280,631 267,830 12,801 286,325 273,880 12,445	18,355 17,154 1,201 11,507 7,388 7,278 110 9,946 9,607 339 498,023 443,951 54,072 511.031 465,996 45,035 523,763 477,419 46,344	705 691 14 220 183 180 3 439 417 22 27,275 23,217 4,058 28,928 25,907 3,021 28,051 25,254 2,797	35 36 37 38						
1,841 1,805 2,024 2,155 724 1,937 1,980 724 1,731 1,817 542 1,969 2,001	28,578 † 28,340 238 36,502 † 35,855 647 † 65,080 † 64,195 885 † 59,680 † 58,718 962 † 58,353 336	3,748 3,614 134 1,058 852 206 4,806 4,466 340 5,069 4,734 335 4,598 4,474	14,965 14,919 46 12,814 12,508 306 27,779 27,427 352 28,064 27,541 523 26,053 25,865	27,408 27,178 230 31,367 30,760 607 58,775 57,938 837 53,997 53.055 942 51,350 51,016	625 625 3,926 3,894 32 4,551 4,519 32 4,006 3,998 8 6,284 6,283							

operations included. done by other Agencies included,

A.—VACCINATION
STATEMENT No. I—Showing the particulars of Vaccination in

			Re	-vaccinatior	1.	Percentag cessful c which the were kr	ases in results	Persons success- fully
No.	Divisions and Districts.		Total.	Successful.	Unknown.	Primary.	Re- vaccina- tion.	vacci- nated per 1,000 of popula- tion,
(i)	(2)		(13)	(14)	(15)	(16)	(17)	(18)
		7						
35	SAGAING DIVISION—concles Sagaing District Rural Urban	(I ₁ ,	16,409 15,229 1,180	5,140 4,440 7 00	3,538 3,426 112	98· 77 98· 75 99·01	39·93 37·62 65·54	69 [.] 93 68 [.] 17 99 [.] 02
36 37	Katha District Upper Chindwin District Rural	•••	1,436 4,000 † 3,988	270 2,106 2,096	34 128 128	98·99 89·59 89·95 70·97	19·26 54·39 54·30 83·33	46·34 46·32 46·24 52·68
38	Urban Lower Chindwin District Rural Urban	•••	8,699 8,546 153	5,474 5,409 65	995 964 31	89.20 83.99 95.76	71.05 71.34 53.28	40:22 40:30 37:41
	Total for 1931-32	•••	*†355,215	81,031	99,666	96.97	31'71	44.50
	Rural	•••	*† 175,450	42,448	30,055	96.85	29.19	41.66
	Urban	•••	† 179,765	38,583	69,611	97'99	35'03	64'93
	Total for 1930-31	•••	*† 269,704	68,578	38,835	96'81	29.70	49.55
	Rural	•••	*†196,833	44.981	30,067	96.73	26'97	- 48'95
	Urban	•••	†72.871	23,597	8,768	97.69	36'81	54'48
	Total for 1929-30	• • •	*† 331,160	85,638	57,201	96.63	31'26	52.09
	Rural	•••	*† 252,342	65,868	3 7,461	96'53	30°65	52.05
	Urban	•••	*† 78,818	19,770	19,740	97.62	33'46	52.49
	FEDERATED SHAN STATE	ES•						
	Northern Shan States Rural Urban Southern Shan States	•••	8,589 † 8,105 484 8,477	5,949 5,729 220 2,589	852 852 516	98.05 98.06 96.64 96.29	76·89 78·99 45·45 32·52	52·44 52·11 97·02 36·55
	Rural Urban	•••	† 7 ,676 80 1	2,241	427	96 . 24 98 . 70	30.91	36·00 77·81
	Total for 1931-32	•••	† 17,066	8,538	1,368	97'10	54'39	43'01
	Rural	•••	† 15.781	7,970	1,279	97.09	54'96	42.57
	Urban		1,285	568	89	98.12	47*49	83*08
	Total for 1930-31	•••	†13,929	7,097	248	96'99	51°87	41.24
	Rural	•••	† 13,289	6,813	210	96'96	52'09	41'09
	Urban		640	284	38	98'74	47'18	89'92
	Total for 1929-30	•••	† 25,299	17,544	590	97'99	71'00	46'84
	Rural	•••	† 24,988	17,333	590	97.98	71'04	46'91
	Urban	•••	311	211		99'70	67.85	39'97

^{*} Secondary

† Dispensary Vaccination and work

DEPARTMENT.

the Province of Burma during the year 1931-32—concld.

	small-pox revious	Average annua deaths from during pr five ye	ccessfully ring previous	Average annua persons su vaccinated du five y	inknown cases cases.	Percentages of unknown cases to total cases.		
No.					-			
	Ratio per 1,000.	Number•	Ratio per 1,000,	Number.	Re-vaccination.	Primary.		
(1)	(24)	(23)	(22)	(21)	(20)	(19)		
35	0.21	70	61.37	20,062	21·56 22·50 9·49	3·65 3·83		
36 37		•••	49·67 44·43	11,608 7,965	2·37 3·20 3·21	1.14 1.86 2.17 2.18		
38	0·19 	66	 42 [.] 97 	15,022 	11.44 11.28 20.26	1.90 3.79 3.72 5.85		
	0'18	1,926	47'93	560,739	28'06	5.04		
			•••	•••	17'13	4.82		
	•••		•••		38'72	6'85		
	0.23	2,512	47.62	557,088	14'40	5.50		
	•••	•••		•••	15'28	5'10		
			•••	•••	12	6.12		
		•••	•••	•••	17.27	4'92		
		•••			14.85	4'86		
				•••	25 05	5.26		
			54·60 	30,532	9 [.] 92 10 [.] 51	2·19 2·21		
	•••		31.40	28,622	6.09	10.76		
	•••	•••	•••	•••	5·56 11·11	10.86 4.95		
		•••	40.22	59,154	8:02	6'99		
	•	•••	•••	•••	8°1C	7'04		
		•••	•••	***	6'93	3'62		
	•••	•••	41'06	60,385	1'78	6'71		
		•••	•••	•••	1.28	6.81		
	•••	•••	•••	•••	5'94	0.83		
	•••		•••	•••	2'33	10.71		
		•••			2.36	10.77		
				•••	•••	0'30		

operations included, done by other Agencies included.

SUM

				JUM		
	Total nu persons v	mber of accinated.	Total nu operations	mber of performed.	Percentag cessful which res kno	cases in ults were
,	Primary.	Re-vacci- nation.	Primary.	Re-vacci- nation.	Primary.	Re-vacci- nation.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Vaccination by Special Staff	536,107	344,077	537,469	344,091	96:98	31.71
Dispensary Vaccination	2,660	4,286	2,660	4,286	91.88	21.28
Vaccination by private practitioners	736	6,838	736	6,838	99:30	46.81
					-	
m)		_	-			
		_				
			-			
Total	539,503	355,201	540,865	355,215	96.97	31.71
Total for 1930-31	554,517	269,671	556,797	269,704	96.81	29.70
Total for 1929-30	569,295	330,990	570,096	331,160	96.63	31 26
Shan States	65,080	17,066	65,080	17,066	97:10	54.39
Total for 1930-31	59,680	13,929	59,680	13,929	96.99	51.87
Total for 1929-30	58,689	25,299	58,689	25,299	97:99	71.00

MARY (Paragraphs 9 and 11).

Av	erage numb accinated by nat	per of persons y each vacci- or.	Number of ch fully vac	ildrer cinat	1 success- ed.	ful	io of successivaccination per 1,000	Total cost of Department.	Average cost of each successful
	ceinators nployed.	Persons vaccinated by each vaccinator.	Under one year.	On und	e year and ler six years.		(12)	(13)	(14)
	355	2,479	160,542		270,494		43.89	Rs. A. P. 4,26,707 6 8	Rs. A. P. 0 11 10
,	•••	•••	855		198		0.15	•••	
	•••		179		409		0.12	•••	•••
		-			_				
	355	2,479	161,576		271,101		44:20		
-	354	2,134	163,223		280,631		49.55	•••	
	350	2,549	162,168		286,325		52.09		
	42	1,937	4,806		27,779		43.01	39,114 11 0	0 9 4
	42	- 1,731	5,069		28,064		41.24	41,471 2 6	0 11 0
	42	1,969	4,598		26,053		46.84	39,671 5 6	0 9 4

A.—VACCINATION
STATEMENT No. II—Showing the cost of the Department in the

No. Divisions and Districts. District Health Onicers. Pay. Inspector of Vaccination. Pay.								Ex
No. Divisions and Districts. Health Officers. Pay. Unspector of Vaccination. Pay.								EX
No. Divisions and Districts. Health Officers. Pay. Unspector of Vaccination. Pay.								
No. Divisions and Districts. Health Officers. Pay. Unspector of Vaccination. Pay.					District			
Confiders Pay. Vaccination Pay. Pa	No.	Divisions ar	nd Districts	s.	Health]	
Rs. A. P. Rs. A. P. P. Rs. A. P. P. Rs. A. P. P. Rs. Rs. A. P. Ps. Rs.						Pay.	Vaccination.	Pay.
Rs. A. P. Rs. A. P. P. Rs. A. P. P. Rs. A. P. P. Rs. Rs. A. P. Ps. Rs.								
Rs. A. P. Rs. A. P. P. Rs. A. P. P. Rs. A. P. P. Rs. Rs. A. P. Ps. Rs.								
Rs. A. P. Rs. A. P. P. Rs. A. P. P. Rs. A. P. P. Rs. Rs. A. P. Ps. Rs.								
ARAKAN DIVISION. Akyab	(1)	(2	2)		(3)	(4)	(5)	(6)
ARAKAN DIVISION. Akyab	-							
ARAKAN DIVISION. 1						Rs. A. P.		Rs. A. P.
1						*****		
1				3		,		
Any and property Any any and property Any any and property Any and property Any and property Any and property Any		ARAKAN .	Division					
Hill District of Arakan	1	Akvab					3	1,200 0 0
PEGU DIVISION. Pegu	2	Hill District of	Arakan	,	ì	•••		•••
PEGU DIVISION. Pegu Division Pegu Peg	3	Kyaukpyu			•••	•••	2	1,006 10 0
56 Rangoon 2 2,400 0 0 0 0 7 7 Tharrawaddy 6 1,648 12 0 0 0 0 1,648 12 0 0 0 0 0 1,648 12 0 0 0 0 0 1,648 12 0 0 0 0 0 4,359 8 0 0 0 0 4,122 8 0 0 0 0 1,294 6 0 0 0 0 0 0 4,122 8 0 0 0 0 0 1,294 6 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 6 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 0 0 0 0 0 1,219 4 0 0 0 0 0 1,219 4 0 0 0 0 0 0 1,219 4 0 0 0 0 0 1,237 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <	4	Sandoway	• • •	•••	•••	•••	2	1,069 5 0
56 Rangoon 2 2,400 0 0 0 0 7 7 Tharrawaddy 6 1,648 12 0 0 0 0 1,648 12 0 0 0 0 0 1,648 12 0 0 0 0 0 1,648 12 0 0 0 0 0 4,359 8 0 0 0 0 4,122 8 0 0 0 0 1,294 6 0 0 0 0 0 0 4,122 8 0 0 0 0 0 1,294 6 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 6 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 0 0 0 0 0 1,219 4 0 0 0 0 0 1,219 4 0 0 0 0 0 0 1,219 4 0 0 0 0 0 1,237 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <								
56 Rangoon 2 2,400 0 0 0 0 7 7 Tharrawaddy 6 1,648 12 0 0 0 0 1,648 12 0 0 0 0 0 1,648 12 0 0 0 0 0 1,648 12 0 0 0 0 0 4,359 8 0 0 0 0 4,122 8 0 0 0 0 1,294 6 0 0 0 0 0 0 4,122 8 0 0 0 0 0 1,294 6 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 6 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 6 0 0 0 0 0 1,219 4 0 0 0 0 0 1,219 4 0 0 0 0 0 1,219 4 0 0 0 0 0 0 1,219 4 0 0 0 0 0 1,237 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <								
Pegu		Pegu D	IVISION.					
Pegu								
Hanthawaddy	5		• • •	• • •	•••	• • •	2 2	2400 0 0
Hanthawaddy	0	Pegu				***	6	1.648 12 0
Insein	8					•••	5	4,359 8 0
IRRAWADDY DIVISION. 11 Bassein	9					•••	9	4,122 8 0
Bassein	10					•••	2	•••
Bassein								
Bassein								
Bassein		IRRAWADD	y Divisi	ON.				
13 Myaungmya 5 2,758 5 6 2,758 5 6 2,372 1 0 Tenasserim Division. 16 Salween 1 928 10 0 0 17 Thaton 4 2,478 12 0 0 18 Amherst 5 3,984 13 0 0 19 Tavoy 1 1,440 0 0 0 20 Mergui 1 782 6 0 0 21 Toungoo 2 1,053 0 0 0 23 Minbu 3 1,181 4 0 0 24 Magwe 4 1,235 0 0 0 25 Pakokku 1 1,463 12 0								
13 Myaungmya 5 2,758 5 6 2,758 5 6 2,372 1 0 Tenasserim Division. 16 Salween 1 928 10 0 0 17 Thaton 4 2,478 12 0 0 18 Amherst 5 3,984 13 0 0 19 Tavoy 1 1,440 0 0 0 20 Mergui 1 782 6 0 0 21 Toungoo 2 1,053 0 0 0 23 Minbu 3 1,181 4 0 0 24 Magwe 4 1,235 0 0 0 25 Pakokku 1 1,463 12 0		3	•••	•••	•••	•••	6	2,599 15 0
Tenasserim Division.	12			•••	•••	•••	5	2,194 6 0
Tenasserim Division.	13	Myaungmya				•••	05	2,758 5 6
TENASSERIM DIVISION. 16 Salween	15							2,372 1 0
16 Salween 1 928 10 0 0 17 Thaton 4 2,478 12 0 0 18 Amherst 5 3,984 13 0 0 19 Tavoy 1 1,440 0 0 0 20 Mergui 1 782 6 0 0 21 Toungoo 4 1,353 8 0 Magwe 2 1,053 0 0 0 23 Minbu 3 1,181 4 0 24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0	13	1 yapon	•••	•••		•••		,
16 Salween 1 928 10 0 0 17 Thaton 4 2,478 12 0 0 18 Amherst 5 3,984 13 0 0 19 Tavoy 1 1,440 0 0 0 20 Mergui 1 782 6 0 0 21 Toungoo 4 1,353 8 0 Magwe 2 1,053 0 0 0 23 Minbu 3 1,181 4 0 24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0					-3	4λ		
17 Thaton 4 2,478 12 0 18 Amherst <th></th> <th>TENASSERIM</th> <th>Division</th> <th>ON.</th> <th></th> <th></th> <th></th> <th></th>		TENASSERIM	Division	ON.				
17 Thaton 4 2,478 12 0 18 Amherst <th>16</th> <th>Salween</th> <th></th> <th></th> <th></th> <th>400</th> <th>1</th> <th>928 10 0</th>	16	Salween				400	1	928 10 0
18 Amherst 1 1,440 0 0 20 Mergui 1 782 6 0 21 Toungoo 4 1,353 8 0 Magwe </th <th>17</th> <th></th> <th>•••</th> <th></th> <th></th> <th>•••</th> <th>4</th> <th>2,478 12 0</th>	17		•••			•••	4	2,478 12 0
19 Tavoy						•••	5	3,984 13 0
21 Toungoo 4 1,353 8 0 Magwe Division	19		•••	•••	•••	•••		1,440 0 0
Magwe Division. 22 Thayetmyo 2 1,053 0 0 23 Minbu 3 1,181 4 0 24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0	20		•••			•••		
22 Thayetmyo 2 1,053 0 0 23 Minbu 3 1,181 4 0 24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0	21	Toungoo	•••	•••	***	•••	7	1,555 6 0
22 Thayetmyo 2 1,053 0 0 23 Minbu 3 1,181 4 0 24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0	. 3	0.0						
23 Minbu 3 1,181 4 0 24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0		MAGWE	Division					
23 Minbu 3 1,181 4 0 24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0		(D)					2	1.053 0 0
24 Magwe 4 1,235 0 0 25 Pakokku 1 1,463 12 0	22	Thayetmyo		1.5		•••	3	
25 Pakokku 1 1,463 12 0	23					•••		1,235 0 0
20 2 100000000	25	Pakokku				•••		1,463 12 0
						•••	1	

DEPARTMENT.

Province of Burma during the year 1931-32 (Paragraphs 14 and 15).

penditur	e.							
Vacci- nators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Total Pay of Establish- ment.	Travelling Allowance.	No.
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(1)
	Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.	
12 3 6 3	6,080 12 0 1,649 2 0 2,423 9 6 1,331 9 0	••	 	•••	 	7,280 12 0 1,649 2 0 3,430 3 6 2,400 15 0	607 0 0 2,092 11 0	3
22 9 . 16 10 9 14	25,680 5 0 5,137 13 0 7,341 2 0 4,522 8 6 5,311 15 0 6,475 8 0		 	2 1 1	551 4 0 180 0 0 105 0 0	7,537 13 0 9,169 14 0 8,882 0 6	3,932 2 6 4,352 3 0 6,418 13 0 4,956 9 0	7 8 9
15 15 15 12 10	6,670 0 0 7,644 4 0 5,316 3 0 5,607 8 9 4,473 10 0		0 • • • • • • • • • • • • • • • • • • •	 2 1	 348 3 0 60 0 0	8,365 14 3	4,177 3 0 6 226 11 0 3,241 12 0	12 13 14
4 13 11 6 5 13	1,591 4 0 5,877 5 10 5,671 5 0 2,834 10 0 3,072 4 0 6,791 2 0		•••	 1 	180 0 0 	2,519 14 0 8,356 1 10 9,836 2 0 4,274 10 0 3,854 10 0 8,144 10 0	3,619 7 0 4,303 10 0 2,624 6 0 1,622 6 0	17 18 19 20
8 6 11 9 6	3,678 8 0 2,937 3 0 5,198 7 8 4,455 5 0 3,759 2 0			 1 1	150 5 0 222 0 0	4,731 8 0 4,118 7 0 6,433 7 8 6,069 6 0 4,950 8 0	1,589 10 0 1,633 12 0 2,773 5 0 3,608 9 0 2,948 8 0	23 24 25

A.—VACCINATION STATEMENT No. II—Showing the cost of the Department

			ì		1						-]	Ex
No.	Divisions	s and Districts.		Distric Healt Officer	h		Pay.			Inspector Vaccinati	r of on.	Pay.		
·(1)		(2)		(3)			(4)		_ -	(5)		(6)		_
							Rs. A	Α, Ι	Р.			Rs.	Α.	Р.
	MANDALA	AY DIVISION.												
27 28 29 30	Mandalay Kyauksè Meiktila Myingyan	•••	•••	•••			•••				3 2 2 3	1,345 1,053 2,473		0 0
31	Yamèthin	•••	•••				•••	,		,	2	1,404	0	0
	SAGAIN	g Division.												
32	Bhamo Myitkyina	•••	•••	• • •			•••			•••		•••		
32 33 34 35	Shwebo	•••	•••	•••			•••			•••	4	1,261	1	0
36	Sagaing Katha	•••	•••	•••			•••				1 2	1,080 3,018	9	0
37 38	Upper Chind Lower Chind		•••				•••				2	2,807 1,287	11 15	0
	130 (101 01)1111	,					•					_,-		
		THERS.										9		
39 40	Meiktila Vace Office of Di Health, Bu	irector of P	ublic	•••	2		13,644	9	0	•••				
		TOTAL	•••		2	1	13,644	9	0	(a) 1	.08	63,076	12	6
	Total	for 1930-31	•••		2		13,200	0	0		97	61,822	13	3
	Total	for 1929-30	• • •		2		17,101	7	0		82	55,226	6	0
	Federatei	O SHAN STAT	ES.	-										
	Northern Sha Southern Sha		•••	•••			•••				1 4	1,036 3,957	0	0
	Total								_	(b) 5	4,993	0	0
	Total for 1930-31								-		5	5,340	0	0
	Total	for 1929-30	•••				•••		-	_,	5	4,735	15	0
										1		1		

⁽a) This includes two Civil Assistant Surgeons, 28 Sub-Assistant Surgeons, one Medical Registrar at Moulmein one (b) This includes 3 Head Vaccinators

DEPARTMENT.

in the Province of Burma during the year 1931-32—contd.

penditure.	enditure.													
Vacci- nators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Total Pay of Establish- ment.	Travelling Allowance.	No.						
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(1)						
	Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.							
11 5 7 12 7	7,097 0 0 2,166 9 0 2,827 9 0 5,049 0 0 3,981 14 0		 	2	372 0 0	8,442 8 0 3,219 9 0 2,827 9 0 7,894 2 0 5,385 14 0	1,480 12 0 846 15 0 2,966 12 6	28 29 30						
4 4 13 8 6 7 8	2,044 11 0 2,237 12 0 6,155 0 0 3,379 1 0 3,308 12 0 4,063 11 0 3,818 12 5			 1	270 0 0 24 0 0	2,044 11 0 2,237 12 0 7,416 1 0 4,459 1 0 6,327 5 0 7,141 6 0 5,130 11 5	561 14 9 2,359 11 0 1,880 8 0 2,1 2 9 7 0	33 34 35 36 37						
•••		3	2,392 6 0	16 	4,371 14 3	20,408 13 3	•••	39 40						
355	1,87,662 1 8	3	2,392 6 0	30	6,834 10 3	2 ,73,610 7 5	1,04,491 6 0							
354	1,81,402 3 10	3	2,425 8 0	2 6	6,272 4 9	2,65,122 13 10	1,05,212 9 6							
350	1,85,243 3 4	3	1,834 0 0	25	5,941 15 0	2,65,346 15 4	1,01,751 2 2							
20 22	8,872 15 0 9.978 8 0			1 7		10,028 15 0 15,730 13 0								
42	18,851 7 0			8		25,759 12 0								
42	18,340 9 0		232 4 0			25,811 1 0								
42	17,933 8 0	•••	•••	8	2,106 2 0	24,775 9 0	11,510 15 6							
Assistant	Commintandant a	f Vaccina	tion of Doggoin 2	7 Dublic	Health Inspectors	and 20 Inchestor	e of Vaccination							

Assistant Superintendent of Vaccination at Bassein, 37 Public Health Inspectors and 39 Inspectors of Vaccination. and 2 Inspectors of Vaccination.

A.—VACCINATION
STATEMENT No. II—Showing the cost of the Department

		1					_					
No.	Divisions and Districts.	Con	ting	encie		Total	Cost.	missio	y Com- oner's Funds.	Provincial Funds.		ľ
(1)	(2)	-	(15)		(16))	(1	17)	. (18)	
	Arakan Division.	Rs	4	Α.	Ρ.	Rs.	А. Р.	Rs.	А. Р.	Rs.	Α.	Pi
1 2 3 4	Akyab Hill District of Arakan Kyaukpyu Sandoway	1 2	.89 [41 243 292	15 7	6 0 0 0	13,126 2,398 5,766 3,829		2,398 5,584	15 6		•••	
5 6 7 8 9	PEGU DIVISION. Rangoon Pegu Tharrawaddy Hanthawaddy Insein Prome	1,1	79 3 778 111 666 598	1 2 11	0 0	15,966 15,094	7 6 2 0 15 6		•••	719 780	•••	0 3
11 12 13 14 15	IRRAWADDY DIVISION. Bassein Henzada Myaungmya Maubin Pyapon	1,3	196 331 156 343 570	14 15 10	0	14,911 15,347 17,792 12,451 10,782	11 0 0 0 4 3		6 0 		•••	
16 17 18 19 20 21	TENASSERIM DIVISION. Salween Thaton Amherst Tavoy Mergui Toungoo MAGWE DIVISION.	1,6	775 353 538 10 568 122	8	0 9 0 0 3 0	12,829 15,778 6,909 6,145	1 7 10 0 0 0 9 3	4,354 128 713	 14 0 3 8 0 3 14 3	1	•••	
22 23 24 25 26	Thayetmyo Minbu Magwe Pakokku Chin Hills	7 8	164 137 755 364	12 5	0 0 0	6,189 9,962	1 0 15 0 1 8 1 0 0 0	1,629 2,410		7,899		0

^{*} The average cost in column 24 is calculated on the total number of successful

DEPARTMENT.

in the Province of Burma during the year 1931-32—contd.

(20)	Federated Funds. (21)	Total. (22) Rs. A. P.	Number of all successful vaccinations and re-vaccinations by special staff only.	Average cost of each successful case. (24)	No.
10,474 10 0 1,837 2 6 181 6 0 180 0 0	•••	13,126 9 6 2,398 1 0 5,766 5 6 3,829 5 0	9,925	0 9 10 1 7 9 0 9 4 1 2 2	1 2 3 4
31,759 11 6 10,929 2 6 10,888 13 0 15,188 10 6 11,534 10 0 8,005 3 9 2,748 5 0	···	32,478 15 6 12,248 7 6 14,633 2 0 15,966 15 6 15,094 11 3 10,753 8 9	18,479 20,891 19,250 19,935	1 3 0 0 10 7 0 11 2 0 13 3 0 12 1 0 6 4	5 6 7 8 9 10
10,186 9 0 2,761 13 0 13,343 11 0 2,004 0 0 16,219 0 0 1,573 0 0 10,808 3 3 1,643 1 0 9,295 9 0 1,487 6 0	···	14,911 12 0 15,347 11 0 17,792 0 0 12,451 4 3 10,782 15 0	27,219 24,221 21,693	0 8 7 0 9 0 0 11 1 0 9 2 0 9 7	11 12 13 14 15
11,858 12 3 970 5 4 6,212 15 0 5,210 13 0 5,427 11 0 1,352 13 0 4,488 11 0 943 0 0 8,731 14 0 2,094 0 0		5,267 5 0 12,829 1 7 15,778 10 0 6,909 0 0 6,145 9 3 12,863 3 0	18,066 21,384 8,498 9,719	1 6 9 0 11 4 0 11 1 0 13 0 0 10 1 0 13 6	16 17 18 19 20 21
5,324 5 0 3,832 10 0 7,470 1 8 7,275 13 0 856 1 0	•••	6,786 1 0 6,189 15 0 9,962 1 8 10,542 1 0 7,899 0 0	9,684 13,955 14,876	0 13 6 0 10 3 0 11 5 0 11 4 1 0 9	22 23 24 25 26

vaccinations and re-vaccinations performed by special staff only (vide column 23).

A.—VACCINATION
STATEMENT No. II—Showing the cost of the Department

					Exp	pen	diture.							_
No.	Division	s and Districts	5.	Conting	encie	es.	Total (Cost.		Deputy (mission Local Fu	er's	Provinc Funds		
(1)		(2)		(15	5)		(16)		(17)	NAMES SANS	(18)		_
	,													
	MANDAL	AY DIVISIO	N.	Rs.	A.	Ρ.	Rs.	A. :	Р.	. Rs. A	. Р.	Rs. A	۸.	P.
27 28 29 30 31	Mandalay Kyauksè Meiktila Myingyan Yamèthin	•••	•••	1,371 62 842 880 649	10 12 0	0	4,762 4,517 11,740	4 14	0 0 0 6 0	•••		690	•	0
	SAGAI	NG DIVISION	N.											
32 33 34 35 36 37 38	Bhamo Myitkyina Shwebo Sagaing Katha Upper Chind Lower Chind	win lwin	•••	135 114 865 490 520 531	0 9 7 8		2,913 10,642 6,339	11 5 9 3 14	0600065	1,986 1 8,947 10,817 1	3 0 4 6	•	•	
39 40	Meiktila Vaco Office of D Health, Bu	irector of	Public	16,492 746	4 15	3	36,901 746	1 15	6 0	•••		36,901 746 1		6
		Total		48,605	9	3	4,26,707	6	8	56,074	3 9	47,736	6	9
	Total	for 1930-31		56,190	2	0	4,26,525	9	4	55,170 1	3 0	47,028 1	15	0
	Total	for 1929-30		57,169	0	4	4,24,267	1 1	0	52,470	7 10	55,176	7	0
	FEDERATE.	FEDERATED SHAN STATES.												
	Northern Shan States Southern Shan States			1,276 1,357	6	0	16,066 23,048	7 4	0	•••		•••	•	
	Total,	Shan States	· · ·	2,633	7	0	39,114	11	0	• •				
	Total	for 1930-31	- •••	4,149	6	6	41,471	2	6	• •				
	Total	for 1929-30		3,384	13	0	39,671	5	6	• • •				

^{*} The average cost in column 24 is calculated on the total number of successful

DEPARTMENT.

in the Province of Burma during the year 1931-32—concld.

-	Paid from			iful Sci- taff		
District Council Funds.	Municipalities.	Federated Funds.	Total.	Number of all successful vaccinations and re-vaccinations by special staff only.	Average cost of each successful case.*	No.
(19)	(20)	(21)	(22)	(23)	(24)	()
Rs. A. P.	Rs. a. p.	Rs. A. P.	Rs A. P.		Rs. A. P.	,
4,886 14 0		***	11,381 0 0	20,062	0 9 1	27
4,350 1 0 3,936 14 0 10,348 15 6 6,788 9 0	412 14 0 580 6 0		4,762 15 0 4,517 4 0 11,740 14 6 7,984 15 0	6,692 10,527 15,503	0 11 5 0 6 10 0 12 1 0 7 5	28 29 30 31
		,	•			
9,860 7 0 5,301 9 0	535 5 0 927 0 0 781 14 0 1,038 0 0	•••	2,996 15 0 2,913 11 6 10,642 5 0 6,339 9 0 8,947 3 0	2,961 19,979 23,495 11,777	1 0 0 0 15 9 0 8 6 0 4 4 0 12 2	32 33 34 35 36
6,849 12 5	411 4 0	•••	10,817 14 6 7,261 0 5		1 2 5 0 7 6	37 38
•••	•••	•••	36,901 1 6 746 15 0	•••	•••	39 40
2,39,820 0 10	83,076 11 4	•••	4,26,707 6 8	575,114	0 11 10	
2,44,566 6 7	79,759 6 9	•••	4,26,525 9 4	578,575	0 11 10	
2,36,156 12 3	80,463 6 9	•••	4,24,267 1 10	607,164	0 11 2	
***	 569 10 0	16,066 7 0 22,478 10 0	16,066 7 0 23,048 4 0	33,103 33,696	0 7 9 0 10 11	
	569 10 0	38,545 1 0	139,114 11 0		0 9 4	
	798 0 0	40,673 2 6	41,471 2 6		0 11 0	
***	391 0 0	39,280 5 6			0 9 4	

Vaccinations and re-vaccinations performed by special staff only (vide column 23).

COMPARATIVE STATEMENT No. III—Showing the number of persons vaccinated in the Province of Burma in

			•						Perso	ons prima
Establish- ments.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number success- fully vacci- nated.	Total number.	Number successfully vaccinated.	Total number.	Number success- fully vacci- nated.
	1922	-23.	1923	-24.	1924	-25.	1925	-26.	1926	-27.
(1)	(2	:)	(3	3)	(4	1)	(:	5)	(6)
Govern- ment.	196,950	180,625	180,459	168,357	6,806	4,997	5,673	5,141	3,745	
Municipal	41,884	39,932	41,977	39,974	49,378	47,231	45,781	43,895	45 ,2 08	41,841
Local Funds.	270,396	256,235	274,439	2 61,9 9 9	42 4,954	402,000	436,679	411,970	419,711	387,665
Dispensary	2,883	2,178	4,534	3,673	6,116	5,175	3,759	2,789	3,574	1,890
Other Agencies.	1,007	857	974	695	537	523	287	260	280	253
			c						~.	
						-				
Total	513,120	479,827	502,383	474,698	487,791	459,926	492,179	462,764	473,914	435,394
Federated Shan States.	10,643	10,559	45,671	43,552	48,476	44,673	67,872	64,245	39,998	38,864

primarily vaccinated and the number of those persons who were successfully each of the undermentioned official years.

rily vaccin	ated.			а .						
Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.	Total number.	Number success fully vaccinated.	Total number.	Number successfully vaccionated.	Total number.	Number success- fully vacci- nated.	Establish- ments.
1927	7 -2 8.	1928	29.	1929	9-30.	1930	0-31.	1931	1-32.	
, (7)	. (8)	(9)	(1	0)	(1	1)	(12)
7,770	5,922	10,137	8,478	10,972	7,444	9,581	7,766	9,335	7,566	Govern- ment.
47,479	42,732	51,565	47,819	49,272	45,680	48,013	44,130	57,1 7 4	52,211	Municipal
432,745	380,584	473,466	440,571	504,704	469,318	492,893	458,389	469,598	436,335	Funds.
6,368	2,157	7,105	2,532	4,863	1,819	3,810	546	2,660	1,200	Dispen- sary.
2 53	229	372	35 6	665	371	220	200	73 6	711	Other: Agencies.
494,615	431,624	542 ,645	499,756	570,476	524.632	554.517	511.031	539.503	498.023	Total
494,615	431,624	542 ,645	499,756	5/0,476	524,632	554,517	511,031	539,503	498,023	Total.
60,034	52,837	71,051	57,133	57,508	50,481	59,680	53,997	65,080	58,775	Federated Shan States.

STATEMENT No. IV—Showing particulars of Vaccination verified

					Total number inspected										
			Total nu												
No	Districts.		persons va	icematea.	By Assistan	t Director Health or	By Inspe Vaccination								
					District Hea		Inspecting								
				Re-	<u> </u>	Re-	n ·	Re							
			Primary.	vaccina- tions.	Primary.	vaccina- tions.	Primary.	vaccina- tions.							
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)							
1	Akyab		18,973	22,290	569	1,017	11,953	16,422							
2	Hill District of Arakan	•••	1,343	1,489	197	575	41	59							
3	Kyaukpyu · · · · · · · · · · · · · · · · · · ·	• • • •	10,944	3,035	2,440	100 20	4,712 874	1,110 260							
4 5	Sandoway Rangoon		3,815 13,482	2,590 1,14,726	740	2,702	10,179	51,234							
6	Pegu		18,916	8,569	5,032	1,141	15,184	4,728							
7	Tharrawaddy	•••	18,541	8,297	209		10,175	1,888							
8	Hanthawaddy Insein	•••	18,587 18,170	7,335 13,076	3,742 1,464	931 220	15,495 9,962	1,641 1,601							
9 10	Prome		25,329	6,431	1,792	698	14,711	2,214							
11	Bassein	•••	26,892	7,336	543	• • •	13,437	3,188							
12	Henzada	•••	27,613	2,447	2,173	35	13,232	634							
13	Myaungmya Maubin	• • •	23,534 21,755	12,116 5,521	2,123 688	681 27	13,894 18,636	7,018 3,771							
14 15	Pyapon	• • •	17,232	7,252	2,352	783	12,664	4,390							
16	Salween		4,005	3,291	1,140	947	2,604	2,012							
17	Thaton	***	17,537	10,127	416	8	9,269	3,669							
18 19	Amherst Tavoy	•••	20,691 8,091	11,463 870	194 3,773	2,891 460	15,931 6,554	8,210 59							
20	Mergui	• • •	9,649	2,203	846	895	6,494	801							
21	Toungoo	• • •	14,346	8,812	1	19	7,671	3,643							
22	Thayetmyo	• • •	7,779	1,805	1,120	766	2,210	708							
23 24	Minbu Magwe	•••	9,8 2 4 14,051	32 4,200	3,008 161	12 10	5,142 7,497	19 1,359							
25	Pakokku	• • •	16,274	3,141	1,534	177	7,596	1,703							
26	Chin Hills	• • •	8,784	1,482	1,782	188	4,200	288							
27	Mandalay	• • •	15,628	20,716	628 900	210 25	7,237	2,513							
28 2 9	Kyauksè Meiktila	• • •	5,540 9,283	3,666 12,473	3,828	4,178	4,495 8,478	1,844 9,745							
30	Myingyan	•••	18,787	2,140	2,970	557	8,256	1,076							
31	Yamèthin	•••	16,518	9,389	1,542	42	13,663	1,799							
32	Bhamo	• • •	3,585	541 1,029	701 530	104 155	• • •	•••							
33 34	Myitkyina Shwebo	• • •	4,208 19,096	4,767			7,042	1,683							
35	Sagaing	•••	19,289	16,409	8,130	395	15,348	6,092							
36	Katha		11,841	1,436	1,645	280	6,896	780							
37 3 8	Upper Chindwin Lower Chindwin	• • •	8,429 11,142	4,000 8,699	3,163 1,075	1,034 584	6,920 6,564	2,446 2,009							
.		• • •													
	TOTAL	• • •	5,39,503	3,55,201	63,290	22,867	3,25,216	1,52,616							
	TOTAL FOR 1930-31	•••	5,54,517	2,69,671	77,612	28,659	3,13,521	1,33,165							
	TOTAL FOR 1929 30	•••	5,69,295	3,30,990	66,581	35,407	3,09,802	1,47,818							
	FEDERATED STATES.														
	Northern Shan States Southern Shan States	• • •	28,578 36,502	8,589 8,477	3,668	2,012	6,566 33,108	1,198 2,778							
	TOTAL, SHAN STATES	•••	65,080	17,066	3,668	2,012	39,674	3,976							
	TOTAL FOR 1930-31	•••	59,680	13,929	4,001	1,257	37,704	6,268							
	TOTAL FOR 1929-30	•••	58,689	25,299	10,008	2,215	38,191	6,702							

by Inspecting Officers during the year 1931-32 (Paragraph 13).

1	Percenta	ge of inspec vaccir	tions to total	number	Percent	tage of cases total numbe	found succer inspected	essful of		tage of	
	By Assistan of Public District Office	Health or Health	Vaccinatio	ectors of n or other g Officers.	By Assistan of Public District Office	Health	By Inspecting		by per perfor	sons	Nο.
	Primary.	Re- vaccina- tions, (10)	Primary.	Revaccinations.	Primary.	Re- vaccina- tions. (14)	Primary.	Re- vaccina- tions, (16)	Pri- mary. (17)	Re- vaccina- tions. (18)	(1)
	3:00 14:67 22:30 3:64 5:49 26:60 1:13 20:13 8:06 7:07 2:02 7:87 9:02 3:16 13:65 28:46 2:37 0:94 46:63 8:77 0:00 14:40 30:62 1:15 9:43 20:29 4:02 16:25 41:24 15:81 9:34 19:55 12:60 42:15 13:89 37:53 9:65 11:73	4:56 38:62 3:29 0:77 2:36 13:32 12:69 1:68 10.85 1:43 5:62 0:49 10:80 28:78 0:08 25:22 52:87 40:63 0:22 42:44 37:50 0:24 5:64 12:69 1:01 0:68 33:50 26:03 0:45 19:50 25:85 6:71 6:44 10:63	63:00 3:05 43:06 22:91 75:50 80:27 54:88 83:36 54:83 58:08 49:97 47:92 59:04 85:66 73:49 65:02 52:85 76:99 81:00 67:30 53:47 28:41 52:34 53:36 46:68 47:81 46:31 81:14 91:33 43:95 82:72 36:88 79:57 58:24 82:10 58:91 60:28	73:67 3:96 36:57 10:04 44:66 55:18 22:76 22:37 12:24 34:43 43:46 25:91 57:92 68:30 60:54 61:14 36:23 71:62 6:78 36:36 41:34 39:22 59:38 32:36 54:22 19:43 12:13 50:30 78:13 50:28 19:16 35:31 37:13 54:32 61:15 23:09 42:97	95·25 17·66 81·56 90·65 99·05 99·05 99·74 100·00 97·43 96·31 99·89 98·85 93·17 94·04 98·97 97·19 91·01 100·00 91·88 88·53 98·76 95·57 86·31 100·00 99·44 92·53 94·41 90·66 71·61 95·28 99·80 98·97	31.66 57.04 48.00 45.89 24.36 8.81 55.45 64.90 25.71 18.50 59.26 7.41 27.24 5.64 62.61 41.34 31.58 43.99 33.33 7.34 72.34 24.76 40.00 25.75 12.03 33.33 61.54 77.42 48.10 33.21 41.39 77.40 31.59 30.66	87.65 73.17 82.09 89.02 99.61 -97.00 100.00 98.39 98.92 98.52 96.40 99.18 96.92 99.83 99.51 94.70 98.63 98.34 97.62 90.30 97.26 83.62 98.74 97.05 91.03 83.21 96.71 99.09 92.53 91.93 96.42 92.83 96.91 97.65 82.08 92.00 95.96	17.60 52.54 34.41 4.23 32.13 18.97 29.82 16.51 30.67 40.06 33.75 9.94 19.86 9.28 15.58 27.04 13.08 15.51 49.15 40.07 14.25 75.99 73.68 8.17 13.92 32.64 42.62 45.01 21.98 19.24 58.75 58.41 38.26 22.31 38.88 69.49 27.36 24.53	95.68 84.17 87.60 94.14 99.29 98.93 99.90 98.66 97.93 100.00 98.38 99.68 98.56 96.60 98.47 98.03 97.22 98.84 97.56 98.51 98.51 98.51 99.31 97.21 99.31 91.99 92.81 96.64 100.00 94.03 95.34 98.77 98.99 89.59 89.59 89.59	21·04 54·16 35·88 7·13 32·93 22·02 47·45 19·34 34·09 43·97 34·75 25·60 24·04 11·20 15·86 31·11 20·87 20·50 69·11 46·22 16·51 37·24 51·61 11·56 14·17 37·83 32·64 47·11 30·33 19·28 46·53 100·00 72·41 54·54 39·93 19·26 54·39 71·05 31·71 29·70	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38
I	11.70	10.70	54.42	44.66	94.34	28.80	95.57	27.56	96.63	31.26	
	12.84	23:43	22.98	13·95 32·77	65.57	51.39	85·17 90·58	74.29	98:05	76.89 32.52	
	5.64	11.79	60.96	23.30	65.57	51.39	89.68	49.81	97.10	54.39	
	6·70 17·05	9·02 8·76	63.18	45°00 26°49	99.84	34.84	92.14	54.85	96 99	71.00	
-	17 03	1 070	0307	20 49	77.04		1 33	3103	1	1	

APPENDIX A.—Statement showing the ratio per 10,000 successfully vaccinated and the mortality from Small-pox by quinquennial periods.

	,				
Official Year.	Ratio per 10,000 successfully vaccinated.	Quinquennial mean.	Calendar Year.	Ratio per 10,000 of mortality from small-pox.	- Quinquennial mean.
(1)	(2)	(3)	(4)	(5)	(6)
,					1
		Bur	MA.		
1916-17 1917-18	387·35 371·15		1916 1917	0 [.] 72 0 [.] 57	
1918-19 1919-20	424·46 568·98	445.63	1918 1919	0·76 3·99	1.79
1920-21 1921-22	476·39 432·76		19 2 0 19 2 1	2·90 0·92)].
1922-23 1923-24	455·54 475·39	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1922 1923	1·34 2·63	2.15
1924-25 1925-26	485 ²⁵ 479 ⁸⁶		1924 1925	2·31 3·56	
1926-27 1927-28	420 [.] 72 454 15		1926 1927	2·16 1·57	
1928-29 1929-30	505·39 520·93	479.33	1928 1929	2·61 1·70	1.78
1930-31 1931-32	495·10 441:96	, j	1930 1931	0.85 0.40	j
1		••			
		FEDERATED	STATES.		
1916-17 1917-18	185·85 156·26				
1918-19 1919-20	139·47 168·83	170.14			
1920-21 1921-22	195·30 213·08		-		111
1922-23 1923-24	244·21 303·97	306'69			1
1924-25 1925-26	314 [.] 93 457 [.] 27				
1926-27 1927-28	298·85 387·93				
1928-29 1929-30	440 [.] 45 468 [.] 45	402.22	-		
1930-31 1931-32	415·41 430·09	j			
				1	

APPENDIX B.—Statement showing the number of vaccinations performed in Municipal Towns and Notified Areas (to which Vaccination Act has been extended) on children under one year of age (Paragraph 8).

Towns		Number of births during the year 1931-32.	Number of deaths among children under one year during the year.	Number of successful operations on children under one year during the year ending 31st March 1932.	Date of extension of Vaccination Act of 1880.	Date of extension of Vaccination Law Amendment Act of 1909.
Akyab	•••	673	203	511	August 1883	29th March 1910.
Minbya		75	13	7	4th March 1930	9th Sept. 1931.
Kyaukpyu	•••	94	19	60	April 1894	Do.
Sandoway		100	12	74	September 1890	Do.
Rangoon	•••	8,574	2,524	7,056	April 1884	1st May 1909.
Pegu		8 2 4	216	1,193	March 1893	29th March 1910.
Nyaunglèbin	•••	269	93	243	29th March 1910	Do.
Tharrawaddy		186	38	182	October 1897.	23rd July 1929.
Thonzè Zigon	•••	2 95 159	55 33	227 119	Do 11th May 1914	29th March 1910. 9th Sept. 1915.
Letpadan	•••	221	51	218	January 1897	29th March 1910.
Gyobingauk		242	79	124	February 1897	Do.
Minhla	•••	118	20	94	11th May 1914	9th Sept. 1915.
Nattalin		108	18	86	Do	Do.
Sy riam	•••	331	56	272	29th January 1913	29th January 1913
Thongwa		250	42	86	3rd March 1914	3rd March 1914.
Insein	•••	313	104	665	14th March 1912	14th March 1912.
Thamaing		114	33	104	26 th May 1926	2 6th May 19 2 6.
Thingangyun	•••	143	43	207	Do	Do.
Kanbe		151	29	183	Do	Do
Kamayut	•••	143	6 2	175	Do	Do. –
Prome		911	149	903	June 1890	29th March 1910.
Shwedaung	•••	281	46	184	10th Sept. 1917.	23rd July 19 29.
Paungdè		363	95	297	August 1890	29th March 1910.
Bassein	•••	1,424	320	1,284	September 1888	Do.
Ngathainggyaung		1 61	39	1 2 9	February 1890	Do.
Kyonpyaw	• • •	194	43	127	26th Dec. 1923.	23rd July 1929.
Henzada		7 95	52	760	January 1889	29th March 1910.
Myanaung Kyangin	•••	26 6 240	103 240	163 175	July 1889 August 1894	Do. Do.
Myaungmya	•••	236	57	2 7 5	June 1894	Do.
Wakèma		272	52	224	27th April 1907	Do.
Moulmeingyun	•••	233	102	114	20th July 1925	20th July 1925.
Maubin		221	78	192	October 1891	29th March 1910.

APPENDIX B.—Statement showing the number of vaccinations performed in Municipal Towns and Notified Areas (to which Vaccination Act has been extended) on children under one year of age—concld.

en tentiett) o	,, ,,,,,					
Towns.		Number of births during the year 1931-32.	Number of deaths among children under one year during the year. (3)	Number of successful operations on children under one year during the year ending 31st March 1932. (4)	Date of extension of Vaccination Act of 1880.	Date of extension of Vaccination Law Amendment Act of 1909.
Yandoon Danubyu Pyapon Kyaiklat Thaton Kyaikto Moulmein Kawkareik Tavoy Mergui Toungoo Shwegyin Pyu Thayetmyo Allanmyo Minbu Salin Magwe Taungdwingyi Yenangyaung Chauk Pakokku Mandalay Maymyo Myitnge Kyauksè Meiktila Myingyan Nyaung-u Yamèthin Pyinmana Pyawbwè Bhamo Myitkyina Shwebo Ye-u Sagaing Myinmu Mawlaik Monywa		311 207 268 245 541 199 1,650 306 869 657 630 190 241 342 391 224 177 258 306 422 72 789 7,550 770 134 311 325 948 231 329 686 187 203 208 593 156 578 191 90 440 42,205	163	252 164 249 130 358 129 1,518 132 844 332 368 47 65 449 244 95 88 147 114 244 169 420 5,732 548 34 265 307 324 136 331 547 131 160 134 445 102 315 222 10 276	March 1893	29th March 1910. 23rd July 1929. 29th March 1910. Do. Do. Do. Do. 17th Sept. 1914. 29th March 1910. Do. Do. Do. Do. Do. Do. 10th January 1920. 29th March 1910. Do. Do. Do. 29th March 1913. 23rd July 1929. 29th March 1910. Do. 22nd October 1912. 4th June 1930. 29th March 1910. 31st July 1922 29th March 1910. 30th August 1921. 29th March 1910. 30th August 1921. 29th March 1910. 23rd July 1929. 29th March 1910. 5th October 1926. 31st December 1930 29th March 1910.
Total Lashio Kalaw Taunggyi Total		167 70 334	FEDER 37 13 58	TED STAT: 134 33 173		Do.

APPENDICES.

APPENDIX C.—Statement showing the local areas in which revaccination rules under Section 12A of the Burma Vaccination Law Amendment Act, 1909 (as amended by the Burma Act IV of 1928) were in force.

Serial No.	Name	of local ar	eas.		Date of notification.
	MUNICIPAL AN	ID NOTI	FIED ARE	AS.	
1 2	Zigon Thingangyun	•••		• • •	16th May 1929. 16th May 1929.
3 4	Kanbe Nyaunglebin	• • •	•••		16th May 1929. 6th June 1929.
5 6	Thônze Syriam		•••		29th August 1929. 29th August 1929.
7 8	Myinmu Ngathainggyaung	* * *	•••	• • •	16th October 1929. 8th January 1930.
9 10	Moulmeingyun Rangoon	† • • •	•••		8th January 1930. 4th March 1930.
11 12	Tharrawaddy Prome	• • •	•••	• • •	6th May 1930. 18th August 1930.
13 14	Taungdwingyi Thayetmyo	• • •	***	• • •	13th January 1931. 13th January 1931.
15 16	Henzada Tavoy	•••	• • •	• • •	13th January 1931. 13th January 1931.
17 18	Kawkareik Nyaung-U	• • •	•••		13th January 1931. 13th January 1931.
19 20	Akyab Mandalay	• • •	•••		13th January 1931. 31st March 1932.
	DISTRICT	COUNCIL	AREAS.		
1	Hanthawaddy	•••		• • •	9th January 1932.
2 ·	Pyapôn	•••	• • •		28th January 1932.
3	Minbu		• • •	• •	1st February 1932.
4	Lower Chindwin	• • •	•••	• • •	óth February 1932.
5	Kyauksè	• • •	•••		6th February 1932.
6	Myingyan		•••	•••	23rd February 1932
7	Thayetmyo	• • •	• • •	• • •	7th March 1932.
8	Henzada		• • •	,	16th March 1932.



Diagram showing the Proportion of Population protected during the seven official years from 1925-26 to 1931-32 and the Death-rate from Small-pox during the year 1931 in districts where full registration is in force.

요요 🟲	н Akyab.	Hill District of Arakan.	Kyaukpyu.	Sandoway.	n.		dy.	ly.																															es.*	es. *	= 5
			3	es 4	c Rangoon.	o Pegu.	v Tharrawaddy.	ω Hanthawaddy.	o Insein.	Prome.	Bassein.	Henzada.	Myaunginya.	Maubin.	Pyapôn.	Salween.*		8 Amherst.	5 Tavoy.	00 Mergui.	Toungoo.	Thayetmyo.		Magwe.	Pakôkku.	Chin Hills.*	Mandalay.	Kyauksè.	& Meiktila.	Wyingyan.	Yamèthin.	Shamo.*	Myitkyina.*	Shwebo.	Sagaing.	Katha.*	25 Upper Chindwin.*	2 Lower Chindwin.	S Northern Shan States.	Southern Shan States.*	Ratio of deaths from small pox per 10,000 of population
			J	<u> </u>		<u> </u>						12	13	14	13	16	17	16	19	20	21	22	23	24	25	20	2/	28	29	30	31	32	33	34	35	30	37	38	39	40	<u> </u>
											6												•	5 و														÷			
																														9											
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4,600					+	++	+		++		+								+	+															+		H				19.00
4,500																																									18.00 17-00
4,300	-			++		-	\vdash	1-	H		\vdash								- -						-							-									16.00
4,200	+			+	++	+		H	H					7						+	+				+				-								-				15.00
4,100	_		++-	+																	-				+												-				14:00
4, 0 00 -																																									13·00 12·00
3,800				+	++	++		+	\vdash		+											H																-			11-00
3,700			+				-		+														-														-	\vdash			10.00
3,600																																						上			9.00
3,500 3,400			++	++	+			+	++		-											-													7		igwdapprox	H			8·00 7·00
3,300			+	++	++-			+	++		++														+											4		H			6.00
3,200																		77																			\Box				5.00
3,000									1		\bot																				<u> </u>										4·00 3·00
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2,800	4.3			$\dagger \dagger$	+	11																++-		H				++-									╂┼				1.00
2,700 2,600																					22							7						4				+			0.90
2,500						++									<u> </u>		-	<u>N</u> -				-	4	-		<u>N</u> -															0.80 0.70
2,400	77			+																		1		++-	-	8							-					-			0.60
2,300					200																																	1	N -		0.50
2,200																																									0.40
2,000																						8								10		12	- -								0·30 0·20
1,900					. (C) (1/2)																								 										-		0.19
1,800 1,700																																				777					0.18
1.600																																									0·17 0·16
1,500																	1		1	1			1					111					1			1	1		1		0.15
1,400				111	1111		17	1111		1		1111	1111	1				1		1		1	1								1					10			1	N N	0.14
1,200			1			1111						111									1						1111	11/2			111	1				111	1	1		1	0·13 0·12
1,100		1											111							1								1111	1			1				111	1	1	1	77	0.11
1,000													1111										1			7		1111					1			1	1				0.10
900	11/2				1111	THE STATE					1	mil		1													1111	177								NAN KANANINA					0.09
700		17		N	M	SUSSIES ELEVERALISMENT DE LA CONTROLLA DE LA C					111	WANTANA KANAMA						1			1				1	1	111	1111								1111					0·08 0·07
600			1			M	1					KI				1	1	1					1				1		1111	HATISTIKATIKATIKATIKATIKAT	111	1	1	1	1111	1111	1	1	1		0.06
500			1			W.					1111	2711		1								111		1	1			W.		1	7/1					1	1	1	7	1	0.05
400 300		11	1	1		111				1111	1111	WIII		1			17					1111	1				7111	W	11.				M	1		1	N	111	1111		0.04
200	1	11	7	1	11	MI	17		111	1111	111	11/11	111	1	1				1/2			riikiikiikiikii					mannin	W.	<u>WANANANANANANANANANANANANANANANANANANAN</u>	1111	177		13			111		111			0.03
100		1	1	1	111	III		1	1			MIN			1	1			1	7		11111		1		1	1111	<u>IIIXIIXIIXIIXIIXIIXIIXIIXIIXII</u>	11111	MI	77			1	1111	11/1	1	111	111	1	0-02
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27			30	31	32	33	34	35	36	37	38	39	40	



Indicates proportion of population protected per 10,000.

Indicates ratio of deaths from small-pox per 10,000 of population.

^{*} Full registration of vital statistics is not carried out in these districts.





